The Golden Hands Encyclopedia of CRAFTS

The complete guide to traditional and modern home crafts

Volume 12

Golden Hands Encyclopedia of

CRAFTS

Marshall Cavendish

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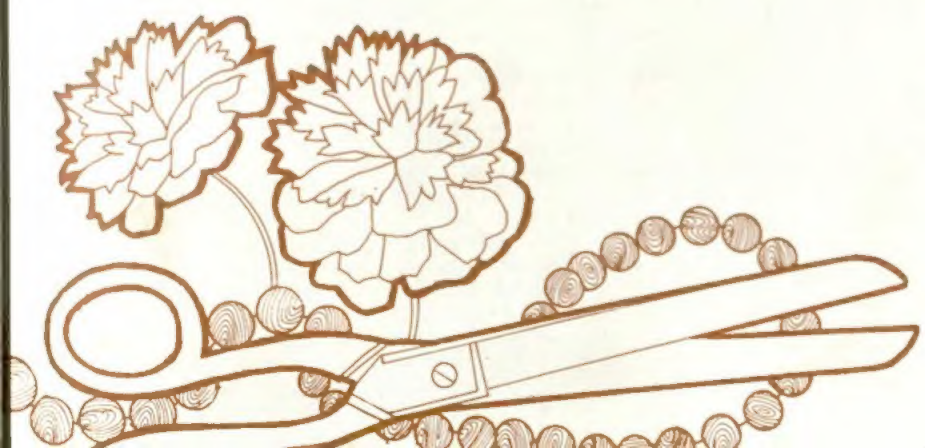

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Metrication
In this volume you will find two systems of measurement. The first set of figures refers to the metric system and the Imperial figures follow in brackets. Wherever possible, a commonsense approach has been adopted and both sets of measurements have been worked out in round numbers. **BUT BEWARE!** This means that metric and the Imperial figures are *not* equivalent so make sure you only work with one or other set of figures.

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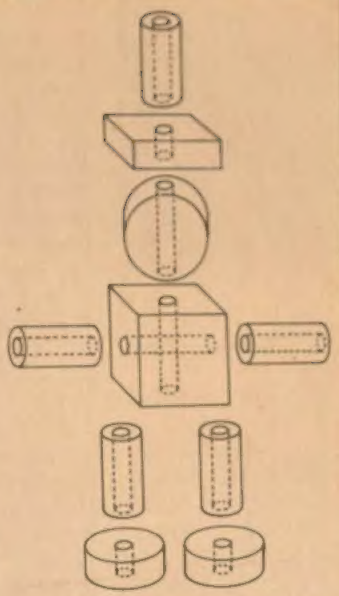
Creative ideas 44



'Bertie Basset'

Based on the familiar character of 'Bertie Basset' the Liquorice Allsorts man, this jolly key ring is made from wood and dowel offcuts painted to represent the sweets of which he is made.

You will need:

Dowel offcuts as follows:
12mm (½″) diameter—5 pieces 25mm (1″) long for the arms, legs and hat;
20mm (¾″) diameter—2 pieces 12mm (½″) deep for the feet;
25mm (1″) diameter—1 piece 12mm (½″) deep for head.

Wood offcuts as follows:
22mm (⅞″) square and 10mm (⅜″) deep for hat brim;
Cube 22mm (⅞″) for body.

Gouache or poster paints in black, white, red, yellow and green.

Clear varnish and fine sandpaper.

Drill and 2mm (⅛″) bit.

Strong black thread, black shirring elastic and darning needle.

Key chain attachment or leather thong and black wooden beads for a necklace.

Making up. Having cut the wood to shape, drill holes through each piece as shown. Smooth all surfaces with fine sandpaper.

Now paint each piece the appropriate colours. Leave to dry and then varnish.

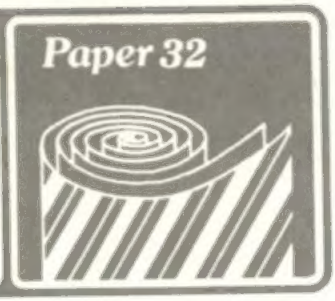
To string the body pieces together, take a length of thread through the key chain jump ring, pull double. Thread on hat, brim, head, body, then thread one leg and foot on each string. Knot each end.

Now thread the elastic through an arm, body, and remaining arm. Knot ends.

Make a necklace by threading on some black beads above the hat and suspending it from a leather thong which is then threaded with more black beads.

Designer: Kay Cunliffe.

Cracker making and decorating



In the first half of the 19th century, Tom Smith, a British sweet-maker, visited Paris. Impressed by the way Parisian confectioners wrapped their bon-bons in paper that was elegantly twisted at both ends, he decided to improve on and elaborate his own sweet wrappings.

First he added a love motto and larger, more decorative wrapping papers. Then he included a small gift and sandwiched a friction strip of saltpetre between the layers of paper. When pulled, the strip went off with a bang.

Camera Press

Thus, in 1840, the ingenious idea of the cracker came into being.

The success of the cracker was immediate. As popular with adults as with children, crackers were something to be enjoyed all the year round. No celebration was complete without them—engagement, wedding, birthday and christening parties, public holidays and anniversaries as well as Christmas —and specially designed crackers were often introduced to commemorate memorable events.

This idea of making special crackers to suit the occasion seems worth reviving and, since they are not difficult to make, designing and decorating your own personalized crackers could prove a very enjoyable project.

Materials and tools

It is possible to buy all the materials required from cracker maker suppliers: bangers, mottoes, tiny gifts for fillers, stiffening card, lining paper, crêpe paper, motifs for surface decorations and formers.

Alternatively, you may prefer to buy only bangers from the suppliers, choose your own papers and fillers, and make a pair of formers for yourself.

Formers are the essential tools for cracker making, hollow tubes rigid enough to retain the cylindrical cracker shape throughout the making process.

If you make your own, use plastic drain piping or a similar firm tubular material 4cm (1½″) in diameter. Cut one piece 125mm (5″) long and the second 250mm (10″) long. If your formers differ from these traditional measurements, you will have to adjust the size of your cracker papers accordingly.

Decorative outer wrappings are usually made of crêpe paper but plenty of other papers, ranging from newspaper to gift wrapping paper, are just as suitable. The only essential quality is 'tearability'. Cut a piece of paper into an oblong, with the grain running lengthwise. Roll into a cylinder, then pull apart. If it tears quite easily, your paper has passed the suitability test.

Lining paper should be quite thin. White tissue paper, airmail writing paper and flimsy bank typewriting paper are all suitable.

Stiffening card is rolled to make the firm central cylindrical shape of the cracker. Use a fairly thick but pliable card, such as is used for cereal packets.

Fillings. The little gifts that go inside crackers can be almost anything you choose—from a solid gold swizzle stick to a plastic whistle—providing they are not dangerously sharp, highly inflammable, extremely fragile or too large to pass through the diameter of the formers you are using.

Crackers can add pleasure to parties. The snap of the banger is exciting, the pulling and tearing of paper is fun, and little gifts are eagerly sought.

Below: this delightful box of early crackers was designed and made by Tom Smith, the man who invented crackers.

Michael Woods/Tom Smith Collection

Basic crêpe crackers

Single crêpe is traditional cracker paper and the best with which to make your first crackers. A roll of crêpe paper generally measures about 50cm x 260cm (20″ x 102″) and will make 16 crackers. (The leftover crêpe can be cut in half then re-joined with a central decorative band to make 8 more crackers.)

You will need:

Crêpe paper.
Lining paper.
Stiffening card.
Bangers.
Mottoes (optional).
Fillings.
1 metre (39″) string.
A pair of formers.
Ruler, scissors and clear general purpose glue, such as UHU.

☐ Cut the crêpe into pieces measuring 305mm x 160mm (12″ x 6¼″), with the grain running parallel to the longest side.

☐ Cut the lining paper into pieces measuring 280mm x 150mm (11″ x 6″), and the stiffening card into pieces measuring 150mm x 90mm (6″ x 3½″).

☐ Lay the papers in neat piles on your work table. Add the mottoes, bangers, fillers, formers and glue (fig.1). Assembling your materials neatly like this will help greatly towards the efficiency of your cracker making.

☐ Anchor your string to the table leg on the far right-hand corner and place the loose end of the string facing you across the table (fig.1).

☐ Frill the short ends of one piece of crêpe paper by stretching the ends lightly with fingers and thumb. Lay it horizontally on the table.

☐ Place a piece of lining paper horizontally on top of the crêpe. Line up the bottom edges of both papers leaving 2cm (¼″) of crêpe visible along the top edge. Centralize a banger and motto on top of the lining paper, and place a piece of stiffening card vertically on top (fig.2).

☐ Spread a few small dabs of glue along the edge of the visible strip of crêpe and place the formers together, the small one on the right-hand side, so that they meet precisely along the right-hand edge of the stiffening card (fig.3).

☐ Holding all the materials together, roll them over the formers as tightly as possible making a tube shape. A little pressure at glue points will ensure the crêpe is secured. A tight tube shape and well glued papers are important.

☐ Keeping the large former firmly in position, gently ease the small former 3.5cm (1⅜″) to the right. If the paper is too thick for you to see through, you should be able to feel this gap. Accurate measuring is very important.

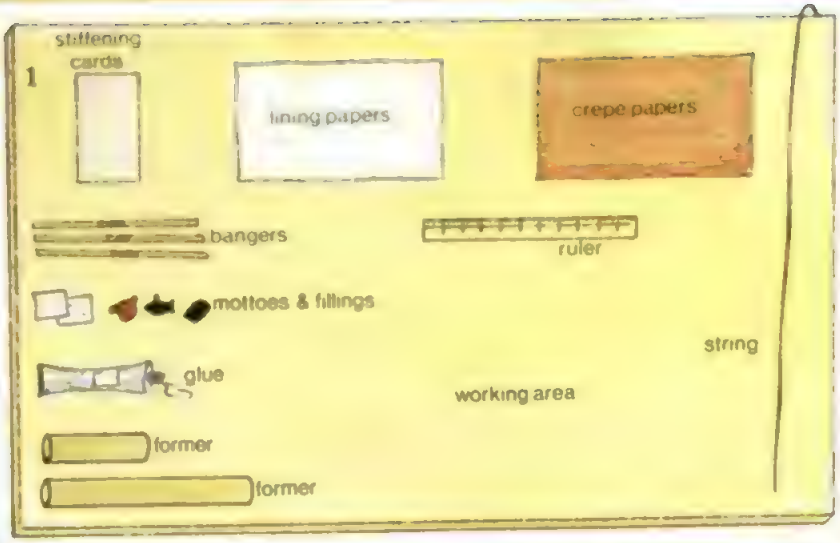
☐ Now make the choke. Centralize the string over the gap. Draw it over the tube towards you, underneath and then over towards you again. Keep the string quite loose at this stage (fig.4).

☐ Hold the cracker with your left hand, spreading your fingers so they grasp both formers (fig.5). Let the loose end of string lie between index and second finger as shown.

☐ Take the loose end of string in your right hand and pull tight, simultaneously pulling the cracker towards you with the left hand so that, in effect, the string is pulled tightly and evenly from both directions.

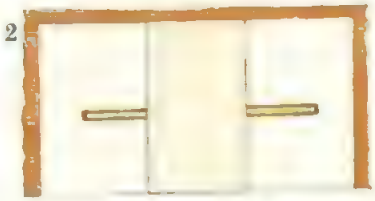
☐ Press the small former back to its original position abutting the larger one (fig.6). Then remove it completely but on no account allow the larger former to shift or fall out because it is almost impossible to replace without damaging the cracker.

☐ Untie and remove the string. Then slip the filling down the large former into the cracker. Ease the former out

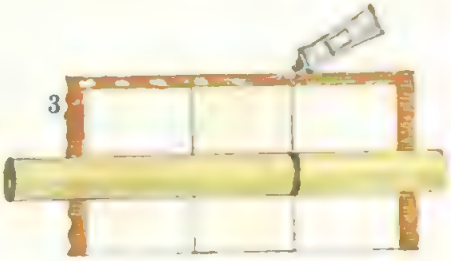


1. *A neatly arranged work table helps towards the efficiency of cracker making.*

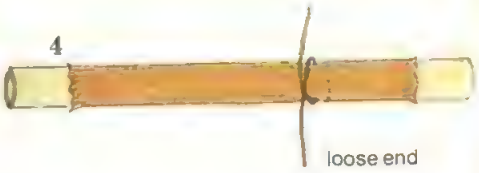
2. *Bottom edge of crêpe and lining paper are neatly aligned. Motto and banger go on top and are covered by the stiffener card, which is placed vertically with bottom edge aligned with crêpe and lining paper.*



3. *Correct positioning of the formers is essential to the success of cracker making.*



4. *Small former is moved to leave a gap precisely 3.5cm (1⅜″). Loop the string loosely round the cracker and let it lie dead centre in the gap.*



5. *Hold both formers with left hand as shown, letting the string lie between index and second finger. Loose end of string is under the wrist ready to be pulled by right hand.*

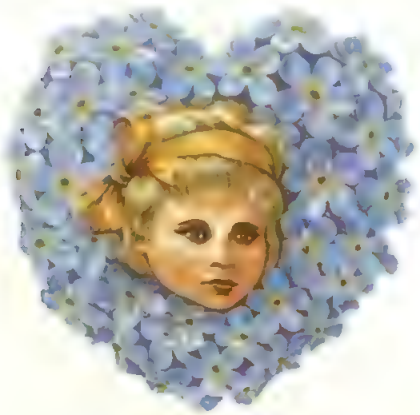
6. *Push the small former back to its original position to firmly crease the choke. Then remove the former completely and untie the string.*

Gary Shewring

a few inches and check that the filling is in the stiffening card central area of the cracker. If necessary use something long and thin, such as a knitting needle, to push the filling out of the former and into the cracker proper.

Turn the cracker round so the former is on the right-hand side. Gently ease the former out with your right hand until there is a gap of 3.5cm (1½") between it and the stiffening card.

Now make the other choke, using exactly the same method as before but treating the tube of stiffening card as though it were the second former.



Creating variations

Once you have made the basic cracker shape in crêpe, it is fun to explore the possibilities of using other papers and to add extra embellishments to your crackers.

As stated, crackers are essentially made to be pulled apart. For the basic wrapper covering the whole cracker—central cylinder, chokes and trumpet shaped cracker ends—it is important to use a paper that tears easily. Check that the grain runs lengthwise, as this facilitates pulling the cracker.

As already described supple, stretchy papers like crêpe can be given a decorative touch by frilling the ends. More rigid papers can look effective if the ends are cut into a fringe and curled (this is best done after the cracker has been made up), and flimsy papers, such as tissue, look delicately pretty if the ends are cut with pinking scissors.

Other decorative effects can be achieved by including an extra layer of paper in a contrasting shade or pattern. Superimpose this layer on the basic cracker wrapper by placing it beneath the basic wrapper when making up the cracker. Cut the second sheet slightly shorter, perhaps with scalloped or zig-zag edges, so that it covers only the cylinder, chokes and part of the trumpet ends.

Adding surface decorations

Plastic and foil papers, most wallpapers, flocked papers and materials like hessian and netting do not pass the destructibility test and therefore cannot be used in any of the ways described so far. They can, however, be incorporated in your crackers providing their use is strictly confined to covering the central cylinder only, never the part that is to be pulled to pieces—ie chokes. This type of decoration should be cut to size and stuck in position after the cracker has been made up.

The firm central cylinder of the cracker offers an ideal surface on which to stick or pin ornamental motifs.

Use self-adhesive parcel ribbon to make ornate butterfly bows, make tiny bouquets from flowers you have pressed and dried, use decorative cut-outs from paper doilies, flower seed packets and photographs, quill motifs perhaps incorporating a few small beads, or make floral decorations with tiny fircones or glixia and a few dried bay leaves.

A look round your local stationers and haberdashers will suggest lots of other attractive and relatively cheap ideas: scrap reliefs, sticky-backed initials in metallic paper, sequinned motifs, miniature sprays of artificial flowers or fruit, gummed paper shapes and inexpensive brooches and badges.

Bands of decoration can also be added to the cylinder or cracker ends. Use paper or ribbon, as narrow or wide as you wish, cut into straight strips or geometric shapes.

Although all these crackers were made by the same basic method, each achieves an individual look. Papers of different textures, colours and patterns are used singly or combined. Ends are plain, frilled or fringed. Decorative touches have been added by bands of hessian, velvet and lacy paper doilies, feathers, sequins and scrap reliefs (a few of which are shown on this page).

Modelling the features

In the previous chapter instructions were given for the building of an armature and for the first steps in the modelling of a life-size head. This chapter considers the individual features separately—and the eventual removal of the portrait bust from the supporting armature.

Although each feature must be attended to separately, do not forget that the relation of these features to each other is of prime importance, and that the two sides of the face are rarely identical in any person.

The eyes. Never lose sight of the fact that an eye is a sphere lying and moving in a long socket, partially covered by lids of skin. No amount of painstaking detail will give a sense of reality if this primary fact is not conveyed.

Concentrate in this order on: the bony structure of brow edge, nose and cheek bone; the size and spherical shape of the eyeball (a side view is absolutely essential here), and its placement in the socket; the drawing of the lids. Be careful not to get too crude a stare by having the lids too open, so that the iris is completely exposed (fig.1).

Mouth. Observe that the upper lip can be presented basically by three masses, and the lower by two. The expression gives any mouth hundreds of possible shapes. Remember, however, the basic shape of the teeth beneath. This is the constant factor, so check for it on the side view of your model. Be careful to avoid a 'clenched teeth' look by

1. *As attention is given to individual features, especially the eyes, the expression becomes that of a real child.*

Nelson Hargreaves

studying the division between the lips with special care.

The eyes and mouth are the most directly expressive features. The colour, mobility, brightness and liquidity of the eye and the mobility and depth of colour of the mouth are qualities you must somehow suggest by shape alone. Success in this depends on good interpretation as much as observation; a lifelike look depends entirely on an intelligent appreciation of what you see, and never on blind copying.

The nose. This can be rendered much more easily by simple observation. The transition from underside to upper lip is often neglected, so take particular care of this.

The ears. Relate the ear very carefully to the whole profile or you will get all kinds of apparent distortions. As very general rules, remember: the height of the ear tends to be the same as the distance between the line of the brow and the tip of the nose; the general slant of the ear tends to correspond to the general slant of the profile.

Hair. Divide this area into broad masses, and emphasize any natural wave. To avoid the effect of a wig, pay special attention to the hairline. Stress the point where it grows back from the temples in an almost imperceptible transition of shape. Look at how the hair lies round the ears and neck, and see that the way you choose to represent hair is the same as the way you suggest eyebrows. This approach will do far more than elaborate texturing and attempts to represent individual locks.

Finishing the piece

You will by now have discovered how a lively feeling emerges with the minimum of detail.

Finishing off the piece now becomes a matter of taste and choice.

You may want to represent very tiny details (at the risk of losing some spontaneity of effect), or you may prefer to treat the head more impressionistically, suggesting rather than defining shape.

Before you decide that the modelling process is complete, look at it under varying types of illumination, both natural and artificial.

Preparing the work for firing

Removing the armature. When you are satisfied that the model is near completion, let it dry to the leather-hard stage.

☐ Separate the model from the baseboard by sliding a thin steel blade or clay cutting wire between the two.

☐ In the case of a head built on a simple post, ask a friend to grasp the baseboard firmly as you gently wriggle and twist the head until it comes up and off the post, leaving the paper and plastic bag inside.

☐ Lay the model on some soft padding and gently pull out the newspaper and plastic.

If this operation proves difficult, or if you are using the second type of armature, adopt a different procedure.

☐ Simply slice the model into as few pieces as possible to enable you to remove them from the armature. Choose your cutting lines to avoid subtly modelled areas. Usually this means cutting off a large part of the cranium, and cutting a line down the head and neck behind the ears to the base.

☐ The next stage in both cases is to scrape out the interior of your model to leave an even thickness of 1.270cm to 1.905cm (½″ to ¾″) all over.

Reassembling cut pieces. Score the edges to be joined and coat with slip. Press the cut edges gently and firmly together.

☐ Retouch the surface modelling if it has become blurred in handling, and work carefully down the joints to remove excess slip. Press in slightly hardened clay where there is any indentation or gap.

☐ Now let the head dry out slowly and completely, in a place where air can circulate freely around it. A small pierced wooden platform is ideal for this purpose (fig.2).

2. *As the head dries out on a pierced platform, a wooden block can be prepared to support the finished work.*

If you have modelled thin pieces, such as the pigtails on the head shown here, which leave the body of the work and then return to it, keep these damp until last by means of small pieces of wet rag.

It is also a good thing to pierce small holes from the exterior to the interior of the model in any inconspicuous place such as the nostrils.

When the head is completely dry, it is ready to be fired.

The complete portrait

A portrait bust is usually improved by mounting it on a wooden block or pedestal. The best way to do this is illustrated by the child's head—a clay box underneath is made as part of the model.

It is possible to make a socket for this shape in a piece of wood and fit the two together. A light mahogany, for example, looks attractive with terracotta.

Finally, if there is a slight crack or other small imperfection in the fired piece, it can be repaired. Carefully scrape a little of the fired clay from the interior (or, better still, leave an easily detachable knob inside before firing). Pulverize it in a mortar, mix it with a clear cellulose adhesive such as Durafix and press it into the crack or hole.

Making classic, lined shades

Cloth — lampshades 4

The cover for tailored, lined lampshades is made in two sections, one for each half of the frame. One of the sections is fitted and shaped on the frame itself and then used as a template for the other section. The pieces are then seamed together and the whole cover replaced on the frame and stitched to the rings.

Usually you have a choice of whether to fit the cover on the straight or bias

grain. Of the two methods, fitting on the bias grain is easier because the fabric is more pliable, but it is more wasteful and some patterns do not look right when used this way.

Straight drum shapes should always be fitted on the straight grain because it helps to maintain the correct shape. Very waisted shapes—where the circumference is less in the middle of the frame than at the top—must be fitted on the bias grain so that the fabric will be stretched at the top ring when it is replaced on the frame.

The fabric for the lining can be cut on the bias grain but if you use a pliable fabric, such as crêpe-backed satin, it can easily be fitted on the straight grain which is less wasteful. For estimating the amount of fabric, see Lampshades chapter 1, page 1164. For preparing the frame see Lampshades chapter 2, page 1184.

Instructions in this chapter are for a bias-grain cover with a straight-grain lining. To fit a straight-grain cover, follow the instructions for fitting the lining but mark and stitch the two sections as for the bias-grain cover. The instructions for a drum shape are given at the end of the chapter.

The lining

This type of lampshade should always be fitted with an internal lining which hides the struts and gives it a professional finish. Internal linings are known as balloon linings because although they are fitted on to the outside of the frame, in the same way as the cover, when they are stitched in place inside the frame they 'balloon' away from the struts.

Alan Duns

Tailored lampshades (left) are always fitted with an internal lining which hides the struts and makes a neat finish (above). Notice the fabric strips over the slits made in the lining at each arm of the light fitting.

Washing lampshades

Providing that the fabrics used are colourfast and the frame has been painted to prevent rust, lampshades can be washed without danger of spoiling them. Brush off any dust and dip the shade into warm, soapy water. Rinse in clear water and dry in a warm place.

If a speck of blood falls on the fabric from a pin prick while you are making the shade, chew a piece of sewing thread and rub this on the mark.

Fitting the cover

In order to achieve a really smooth, taut cover, as well as the initial careful fitting, it is also essential to keep the grain of the fabric straight without distortion and to place the seams exactly over the struts of the frame.

☐ Fold one of the fabric squares in half diagonally with the wrong side facing out and press the fold lightly with your fingers at each end.

☐ Place the frame on your work surface with the bottom ring facing you and the two bound struts to the left and right. Place the fabric on to the frame so that the fold is level with the centre of the top half: if the frame has eight struts, place the fabric on to it so that the fold is in line with the centre strut (fig.1); if the frame has six struts, place the fabric on to it so that the fold is in the centre of the two top struts.

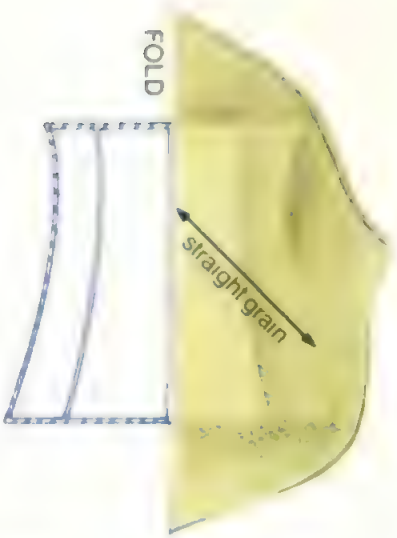
☐ Open out the fabric, keeping the fold in line with the centre strut or in the centre of the two top struts. Pin it to the rings at the top and bottom of the crease, keeping it taut but without stretching it.

☐ Smooth the fabric out to the bound struts with your fingers to mould it to the shape of the frame. Pin it to the tops and bottoms of the bound struts, so that the pin points are facing in.

☐ Place more pins at about 1.5cm (½") intervals down the left-hand strut, easing out any fullness in the fabric. Place the pins at right-angles to the strut with the points facing in. Starting at the top of the left-hand strut, follow the grain line of the fabric diagonally across the frame. Keeping the line completely straight and tight, pin it where it meets the right-hand strut or the bottom ring (fig.2).

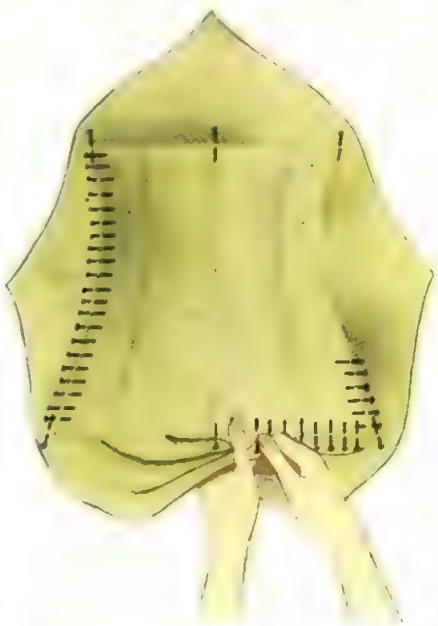
☐ Go back to the next pin down on the left-hand strut and follow the grain down in the same way. Tighten the fabric and pin. Continue in this way, pinning and tightening the fabric away from the left-hand strut diagonally across to where it naturally falls on either the right-hand strut, or the bottom ring (fig.2a).

☐ Working upwards along the grain in



1. *Placing the fabric on the frame.*

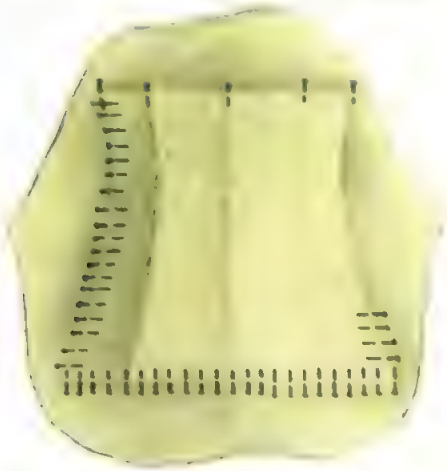
2. *Following the grain line across.*



Barbara Firth

2a. *Tightening the fabric along the grain on to the bottom ring.*

the opposite direction, tighten the fabric from the left-hand strut to the top ring and pin at the top of the intermediate (unbound) struts (fig.3).



3. *Tightening the fabric along the grain up to the top ring.*

Remove the pin at the top of the right-hand strut, tighten the fabric in the same way and replace the pin.

☐ Complete the pinning down the right-hand strut and along the remaining part of the bottom ring, smoothing out any remaining fullness or wrinkles with your finger by running it in the direction of the grain. Never run your finger along the bias grain or you will distort the fabric and possibly stretch it.

☐ Using a pencil, lightly draw down the fabric in between the pins over the outer bound struts. Draw lines about 1.5cm (½″) long inwards from the bound struts along the top and bottom rings. Mark a dot on the rings at the top and bottom of each intermediate strut.

Remove all the pins and remove the fabric from the frame.

Marking the second section. Place the marked section on to the second section with right sides together so that the edges are level and the grain, pattern or slub is running in the same direction on both pieces. Pin the sections together along the pencilled strut lines. Work tailor's tacks at the outer ends of the short pencil lines and at each dot.

Cut round the shape adding about 4cm (1½″) all round.

☐ Machine stitch the pieces together down the pencilled strut lines and fasten off securely.

☐ Cut through the tailor's tacks and open out the fabric. Press the turnings open lightly with your fingers. Spread adhesive along the turnings, press the turnings together so that they adhere and trim to within 3mm (⅛″) of the stitching.

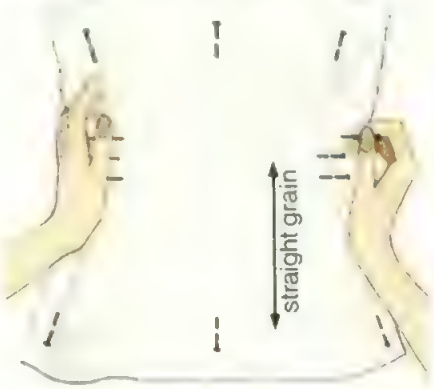
Put the cover to one side while you fit the lining.

Fitting the lining

☐ Fold one of the lining pieces in half lengthwise along the straight grain and crease the ends of the fold lightly with your fingers. Open out the fabric and place with wrong side facing upwards (with crêpe-backed satin this is usually the crêpe side) on to the frame so that the crease is level with the centre of the frame. Pin the fabric at each end of the crease to the rings and then smooth out to the side struts and pin at the tops and bottoms. Do not over tighten at these points or the fabric will not keep to the shape of the frame.

☐ Pin the fabric halfway down the left-hand strut. Tighten along the grain and pin halfway down the right-hand strut.

☐ Working up from these points, pin up to the top ring, tightening the fabric horizontally by pulling from the left and right, and working first on one strut and then on the other (fig.4).



4. *Tightening the lining horizontally between the struts.*

Work downwards to the bottom ring in the same way.

☐ When the sides are pinned, pin the fabric to the rings, tightening only enough to remove any wrinkles. Check that the grain line is completely square and avoid overtightening vertically or you will lose the shape.

Mark the fabric as for the main fabric and remove from the frame.

☐ Mark the second section of the lining in the same way and stitch the two pieces together down the sides so that the stitching starts 3mm (⅛″) in from the marked line at the top and bottom and curves in to about 1cm (⅜″) from the line in the middle (fig.5). This forms the balloon shape of the lining.

Finish as for the cover

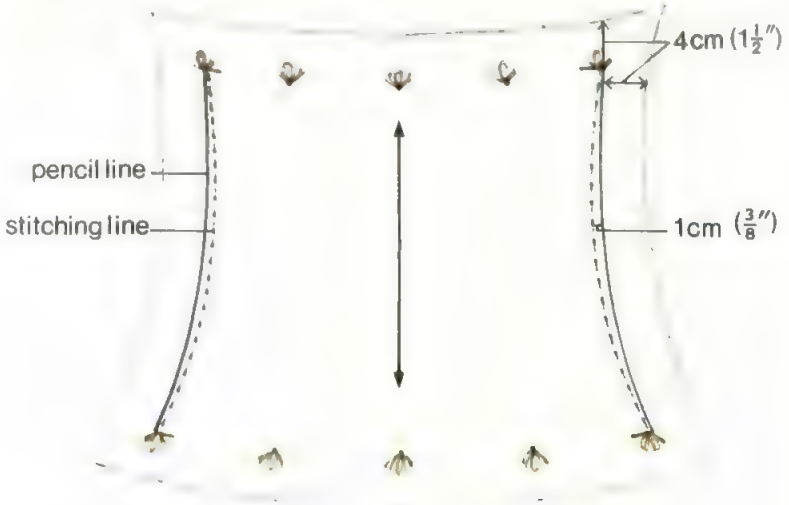
Remove the binding from the struts.

Fitting the cover

☐ Turn the cover right side out and place on to the frame so that the seams lie over the struts which were originally bound and the tailor's tacks line up with the ends of the struts and are on the rings. Pin the fabric to the rings at the tops and bottoms of the intermediate struts. Do not put any pins into the fabric down the length of the struts—they must be placed in the rings only.

☐ Check that the turnings are lying flat over the struts and are not twisted and make any adjustments needed. Working alternately on each side of one of the seams, start tightening the cover on the frame by adjusting the pins. When you make one alteration to one side of the seam, go to a similar place on the opposite side and make the same alteration. Keep checking the seam and grain lines. Insert more pins into the rings between the struts so that the cover is lying taut against the frame.

Stitching the cover to rings. When you are satisfied with the fit of the cover, it can be stitched to the rings. The most comfortable way of doing this is to sit with the frame on your lap with a pad of fabric beneath it to prevent your legs from being scratched.



5. *Tacking the curved stitching line to form the balloon lining.*

Start stitching at a strut and work towards your free hand so that you can hold the fabric taut on to the frame with your fingers as you stitch (fig.6).

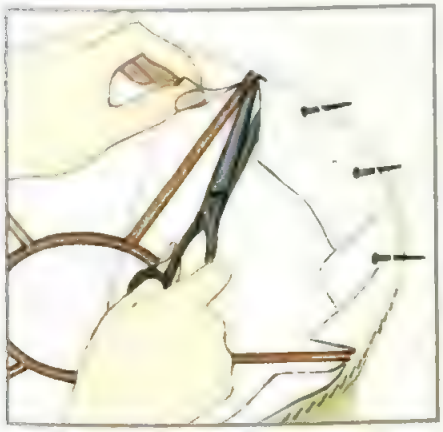
6. *Stitching the cover to the rings and trimming the excess fabric.*

Use each length of thread doubled and start and finish with two or three back stitches. Work in a close, firm hemming stitch, placing the stitches on the outer edge of the ring.

☐ When you have stitched around both rings, cut off the excess fabric close to the stitching.

Fitting the lining

☐ Place the lining into the frame and align the seams with those of the cover. Position the tailor's tacks correctly on the bottom ring and pin. Draw the fabric up the shade and pin on the inside of the ring at the top of each strut. Roll back the excess fabric at the top inside the ring and clip into it in line with the arms of the light fitting and at intervals in between if the fabric seems tight (fig.7). Roll the fabric over the top ring, fold under the fabric at each side of the slits for the fitting, and pin all round to the outside edge so that the pins are over the previous stitching.



7. *Slitting the lining to fit it round the light fitting.*

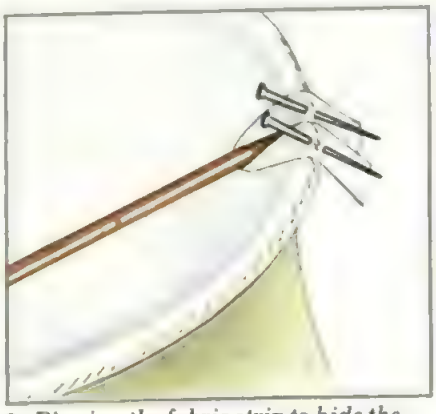
☐ Stand the frame upside down (with the top ring at the bottom), check that the seams are over the struts and pull the fabric on both sides of the seams to tighten it over the bottom ring. Working alternately on each side of the seams, pin the fabric to the ring.

Stitching the lining to rings. Stitch the lining in a similar way to the cover, placing the stitches on the outside of the ring. Cut off the excess fabric close to the stitching (fig.8).

8. *Stitching the lining to the outside of the rings.*

Neatening the slits. To neaten the slits for the light fitting, cut a bias strip for each one, 5cm (2") long x 2.5cm (1"). Fold in the raw edges so they meet in the middle and then fold the strip in half again.

☐ Slip stitch the folds together lightly. Place each strip loosely round a fitting so that it covers the slit and pin the ends on the ring. Secure with a few stitches and trim off any surplus fabric level with the raw edges of the lining (fig.9).



9. *Pinning the fabric strip to hide the slits in the lining.*

Trimming the shade

Finish the shade by trimming with braid, a crossway strip or velvet ribbon (see Lampshades chapter 2, page 1184).

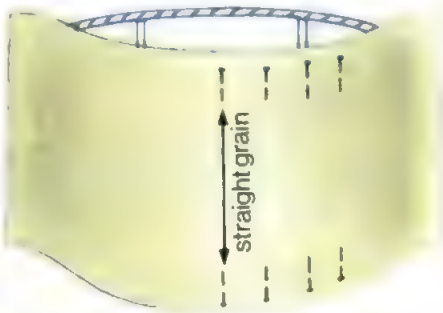
Derek Miller

Lampshades may be trimmed with matching fabric or velvet ribbon for a tailored finish as shown on page 1240 or, for a more elaborate effect (above) there is a wide variety of beautiful braids and fringes.

Straight drum shapes

A straight drum frame is one which has top and bottom rings of the same size—the rings can be circular or oval. Both the cover and lining fabric should be fitted on the straight grain. The method is similar to that previously described, but it is essential that the tightening is done vertically and not horizontally, in order to maintain the correct shape.

To do this, place the fabric on to the frame and pin it to the top and bottom rings so that it is really tight (fig.10).



10. *Tightening the cover vertically for a drum shade to keep the shape.*

Then pin it to the side struts, pulling only enough to remove any wrinkles. Finish the shade as for other shapes, but without shaping the seams on the lining.

Spatter painting; stencils on china

Traditional designs on china which evoke earlier styles and eras can often be reproduced; they are simply applied and result in novel decorations in themselves.

Spatterware was made in England about 150 years ago and sold originally to the Pennsylvania-Germans. Today it is a collectors' item but the same effect can be copied at home. Mottled borders on rims are made by putting a little paint on a plastic sponge, washing-up pad or similar uneven textured surface and dabbing it on the china. This should be practised a few times on plastic or another smooth surface before beginning. Do not try to apply too much paint at once but build up a spattered surface by repeated dabbing over the same areas.

The central motif can be drawn free-hand or applied with a stencil.

Crocks are useful and ornamental, their cool surfaces evoking rich cream, grass and memories of farm life. The splendid collection shown was decorated with stencils. This is one of the least daunting ways of applying decoration if you can't draw. Stencils can be bought at art supply shops or they can be cut out. (Stencils chapters 1 and 2, pages 212 and 240 give details of using and making stencils.)

On curved surfaces the inside areas of stencils tend to bend outward away from the surface to be painted but double-sided tape applied to the under-surface of the stencil will make it stick to the china surface and properly mask the areas which do not receive paint.

If you are cutting your own stencils you can solve this problem by using contact paper which will stay in place and can be peeled away later.

Apply paint with a flat-ended stencil brush, an artist's brush, or by dabbing on colour with a cloth or sponge.

Spatterware plate by Barbara Firth. Bird motif can be traced and enlarged.

Above: trace patterns for two stencil designs (shown on a couple of the old-fashioned crocks in the group opposite) can be cut from stencil paper or from contact paper and applied to a variety of glazed surfaces.


N&C

Laminated plywood

Plywood is cheaper than hardwoods and although plywood is not thick enough to sculpt, it can be laminated – ie, glued together in layers – to give the thickness required. The lines formed by the layers of plywood are attractive and can be exploited to contribute to the design.

The seal

The high relief seal illustrated is made from laminated plywood. It is about 34cm (13½") long.

You will need:

Sufficient plywood to laminate to a thickness of 3.5cm (1⅜"), and to give a facing surface of 39.5cm x 13cm (15½"x 5").

Two pieces of board, slightly larger than the area of the laminate with which to cover the laminate while clamping. Wood glue.

Tools and equipment—see Modelling chapter 3, page 1228.

Bow saw.

Design on tracing paper, carbon paper and a pencil.

Glasspaper grade No.M2 (medium) and No.F1 (fine) or medium and fine grade sandpaper.

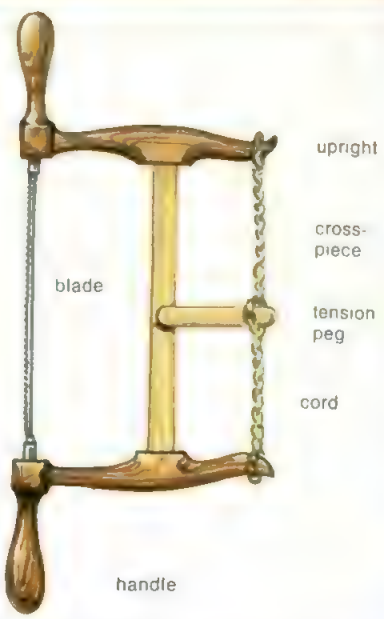
Wax or polyurethane varnish.

Above: profile of the seal showing thick and thin parts of design.

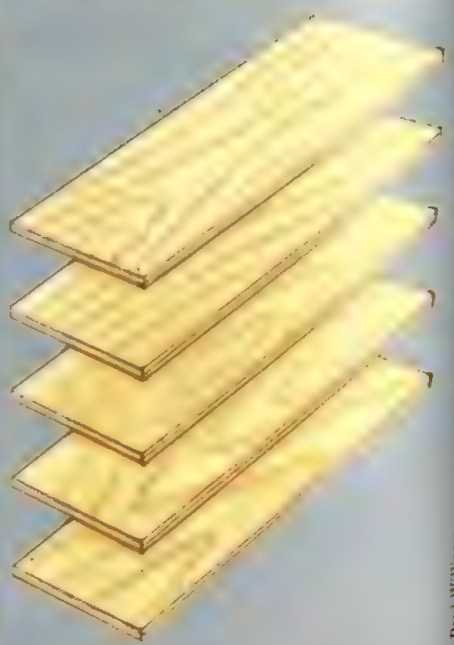
Tool box

A bow saw is used instead of a coping saw to cut through thick sections of timber. The two handles allow both hands to be used giving greater pressure and more control. A length of cord is attached between the two upright sides. A tension peg along the cord is wound round and round, once a blade has been inserted, to tighten the cord which tensions the blade. The peg is secured by propping it against the cross-piece.

The bow saw is useful if you are doing a lot of cutting out, but for the odd item, approach your local timber merchant—who has a power jig-saw—and ask him to cut out the outline.



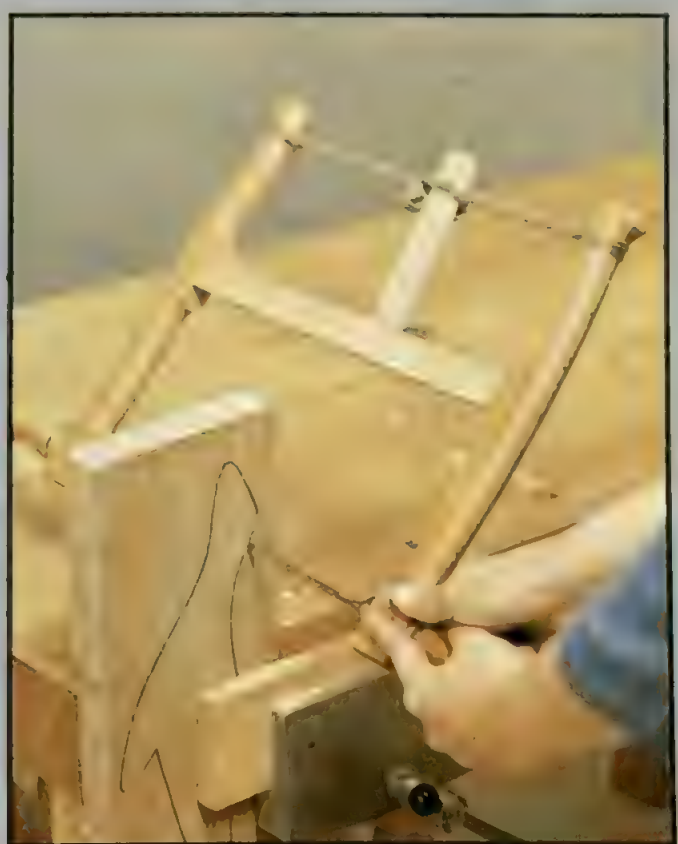
Trevor Lawrence



Paul Williams

☐ Apply the glue to the plywood to form the laminate. Protect the outer

The pattern: use pencil and tracing paper to draw the outline from this life-sized illustration of the seal. Designed by John Matthews.



Ray Hems

surfaces with the two pieces of board and clamp securely until dry.

☐ Trace the pattern on to the laminate and remove the waste using a bow saw. Alternatively ask your local timber merchant to cut out the outline.

Along the side draw a line along the length of the seal. The line curves towards the facing surface where the seal is to be thickest and then tapers towards the head and tail for the thinner sections.

Remove the waste from the front surface using Surform tools.
Draw a central line along the length.

Smooth the surface with a wood file.

Finish with glasspaper No.M2 and No.F1 or sandpaper.

☐ After waste has been removed draw another line along the side edge, all the way round, 6mm (¼") from the back.

This forms a guide line so that not too much waste is removed towards the back which could damage the outline.

☐ Round off to the lines indicated using the Surform tools—use the round tool to form curved areas.

☐ Apply polyurethane varnish or wax.

☐ Suction pads are used to secure seal against wall.

Patterns in square work

One of the interesting things about doing square work is that patterns can be incorporated into the designs. The patterns given here can be varied depending on the size of the piece you are making.

The plain magazine cover given in the previous Basketry chapter is a comfortable size to work on and helps you to become familiar with patterns.

Cover with pattern

Make the cover as described in Basketry chapter 8, page 1222, ie set sticks up in the screwblock, pair and then rand until the work measures 12.5cm (5″) and the weaver has passed in the front of the centre stick.

For working the pattern you will find that you need extra twists round the outer sticks.

☐ On the next row the weaver must once again pass in front of the centre stick. To do this the weaver must pass behind 2 sticks instead of only one on either side of the centre stick.

☐ The next row will be normal and then the odd row must be repeated. Add one more normal row.

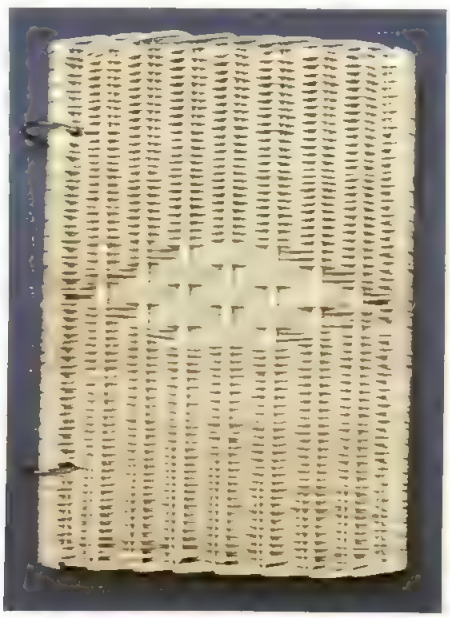
This completes one stage of the pattern. There are five stages consisting of 5 rows each. On the next two stages the pattern is extended and the two after that are decreased to form the diamond shape illustrated.

☐ For the next stage the same thing is done but the weaver must pass in front of the two sticks on either side of the centre stick five times. This is achieved by passing behind the 2 successive sticks next to the centre stick instead of one on every alternate row. Five rows complete the second stage.

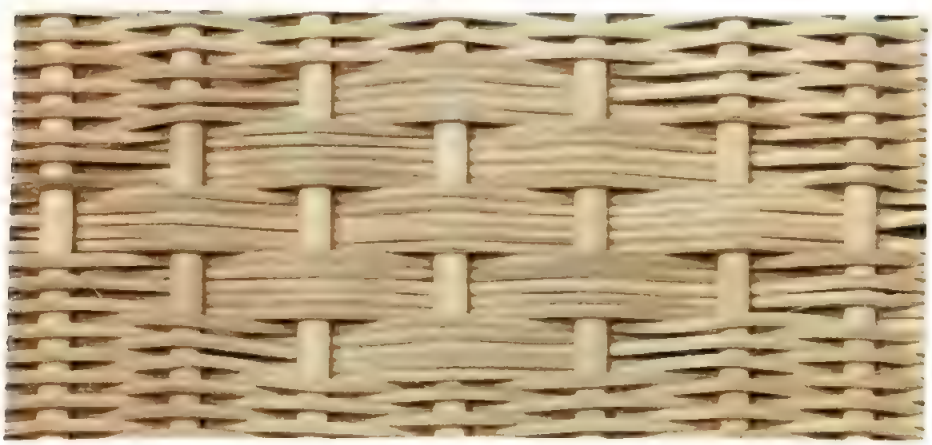
☐ The weaver must now go in front of the centre stick and the second stick on either side of it for 5 rows. Pass behind 2 sticks on every alternate row for 5 rows.

☐ Repeat the first and the second stage in reverse order to complete the pattern.

☐ Continue randing as before to finish. Add a row of mock pairing and put on a border.



The cover with pattern (detail below) can be used as a scrapbook or for recipes. Designer: Barbara Maynard.



Dick Muller

The headboard

The headboard is 91.5cm (1yd) wide and 51cm (20″) high. It can be used to replace an existing headboard or you can attach it to the wall by hooks secured to the wall with wall plugs and positioned to hook round the sticks where the coil pattern starts.

Working with such thick sticks can be awkward so do not attempt it until you have some experience with square work.

You will need:

677gm (1½lb) No.8 (3mm) cane.
No.15 (4.5mm) cane, 5.5m (6yd) long.
9 lengths of 8mm handle cane, 102cm (40″) long or 9 lengths of dowelling—6mm (¼″) diameter—102cm (40″) long.
2 lengths of dowelling—18mm (¾″) diameter—102cm (40″) long.
12 small panel pins.
Screwblock—at least 66cm (26″) long.
Adhesive tape.

☐ Cut the 2 thick sticks so that the ends fit into the screwblock with the 9 inner sticks.

☐ Place the thick sticks so that they are 48cm (19″) apart—centre to centre—and space the other sticks evenly between them.

☐ Weave with well-soaked No.8 (3mm) cane starting with one row of pairing and continue to rand backwards and forwards for 16.5cm (6½″).

☐ Cut the third inner stick from the left level with the randing. Insert one length of No.15 (4.5mm) cane (it must be at least 2.74m (3yd) long) into the weaving just to the left of the fourth inner stick from the left. Coil this piece round and round for about 58cm (22″) and secure it with adhesive tape against the 2 sticks. Leave enough space after the last coil to allow you to put on 16.5cm (6½″) of randing and a row of mock pairing.

☐ Rand backwards and forwards on the first 3 sticks on the left only for 61cm (2′) catching in the coil when convenient.

☐ Cut the third inner stick from the right and place a length of No.15 (4.5mm) cane against the second inner stake from the right. Repeat the coiling as before and end it 7.5cm (3″) short of the previous coils.

☐ Rand backwards and forwards on the 3 inner sticks and then on the 3 right-hand sticks, catching in the coils as you work. Rand to the end of the second length of coil.

☐ You now have to replace the cut stick. Measure the length you need from the end of the coil to the end of the other sticks and add on an additional piece before cutting. Use adhesive tape to keep it in position against the coils until there is enough randing to hold it securely. Remove adhesive tape and

Headboard made on a large screwblock with coil pattern (detail below).

pull the stick up so that the end is butting up to the last coil.

☐ Rand backwards and forwards to the first coil and catch it in where convenient. At the same time bind in the end of the coil cane.

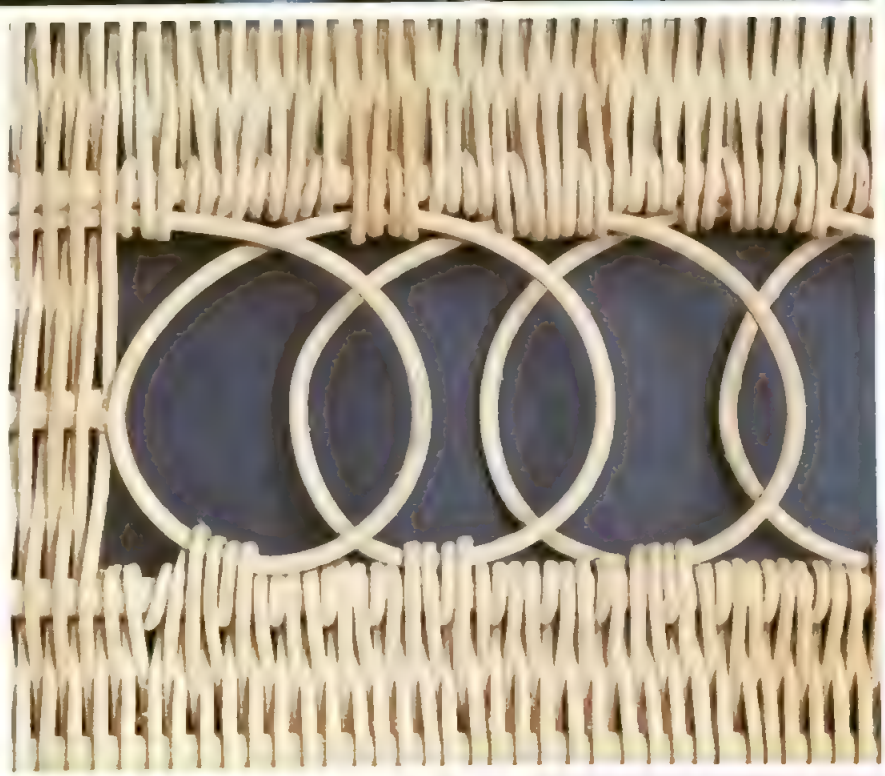
☐ Replace the other missing stick in the same way and rand right across for a further 16.5cm (6½″).

☐ Finish with one row of mock pairing.

☐ The border is put on in the same way as before but insert one stake on each side of each stick otherwise the border will be too loose. You will therefore need 20 stakes 25.5cm (10″) long and one longer piece 50.5cm (20″) long all of No.8 (3mm) cane, for each end.

☐ Try to keep these border stakes inserted to the same depth all the way along. Nip them down and put the border on as before.

☐ Nail the four panel pins into the corners and put in a nail through the end of each coil into the adjoining stick to keep the coils steady.



Beautiful blackwork

Yarn — embroidery 9

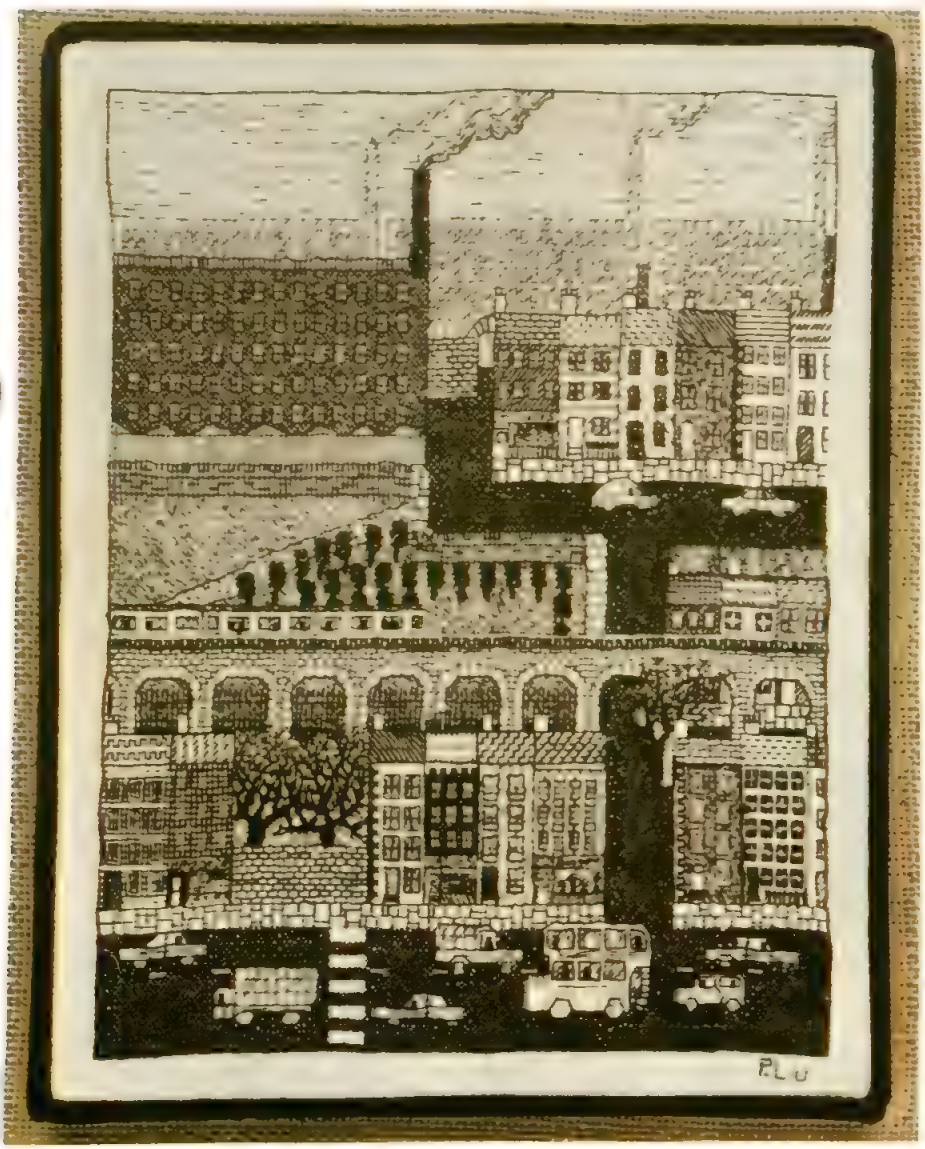
Blackwork is a method of embroidery in monochrome which relies for effect on the contrasting tone values produced by the variety in the density of the pattern fillings and the weight of the yarn used.

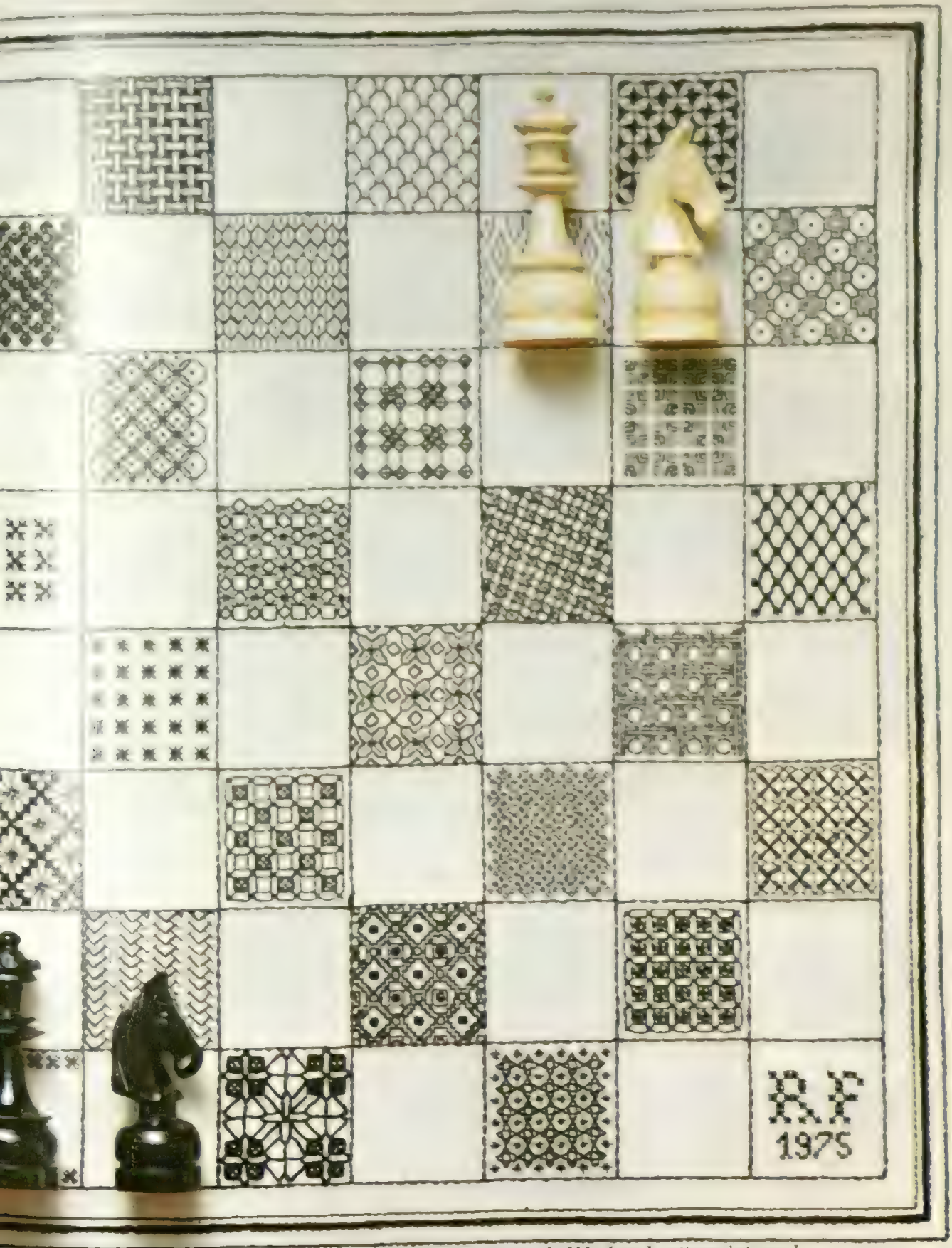
Blackwork originated in Spain and became fashionable in England when Henry VIII married the Spanish Catherine of Aragon in 1509. At first blackwork, or Spanish work as it was sometimes called, was used mainly for decoration of garments but later it was used to decorate household linens and soft furnishings and it reached its height of popularity during the 16th century.

The colours

As its name implies, blackwork is derived from the method of working in black silk or cotton threads on a white or cream background, although any

This town scene, designed by Pauline Liu, is a clever example of how blackwork gives contrasting tone values by varying the density of the stitchery.





One way of keeping a permanent record of blackwork patterns is to work a sampler, such as this one designed as a chess-board by Pamela Tubby.

colour combination can be used if it gives a good contrast between dark thread and light background.

The fabric

Blackwork is a counted thread form of embroidery which means that all the stitches are worked over a specific number of threads in the fabric. Choose an evenweave fabric—one with an equal number of warp and weft threads—so that the stitches will be of identical size when worked over the same number of threads throughout. Evenweave fabrics are obtainable in wool, linen or cotton in a variety of weights from good needlework shops. Sometimes man-made furnishing fabrics are also obtainable in evenweaves, but you should check that the threads are easy to count.

The threads and needles

You will need a selection of threads in all weights to provide the depth of tone and contrast in the stitchery. Machine embroidery cotton No.30, pure sewing silk, stranded cottons, pearl cottons, coton à broder and soft embroidery cottons are all suitable and you can also incorporate some lurex and metal threads.

You will need tapestry needles in a variety of sizes to suit the fabric and threads. The needle should pass between the fabric threads, and the rounded points of the needles prevent the danger of your splitting the threads.

The patterns and stitches

All the patterns are worked by counting the threads of the fabric, usually from a chart. The stitches are simple and mostly variations of running stitch, back stitch and cross stitch which build up into geometric shapes. These can be adapted to the depth of tone required either by using thicker or thinner thread or by adding and subtracting stitches. The spacing of the stitches also enables a lighter or darker tone to be achieved.

In elaborate forms of blackwork the shapes often represent flowers or birds, outlined in running stitch and filled in with different blackwork patterns.

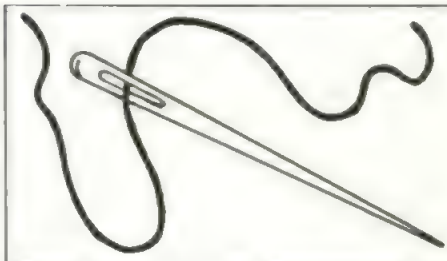
Alternatively, you could simply work it in geometric shapes to form a border on a dress or skirt.

Blackwork chess-board

The chess-board shown in this chapter is in fact a blackwork sampler, showing a variety of filling patterns. By working the patterns in alternate squares with blank squares in between, the sampler becomes an attractive and unusual chess-board as well as a permanent reference for the various patterns.

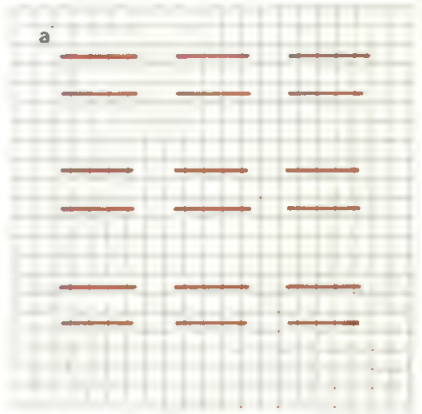
The sampler was stretched over plywood, covered in glass to keep it clean

Trevor Lawrence

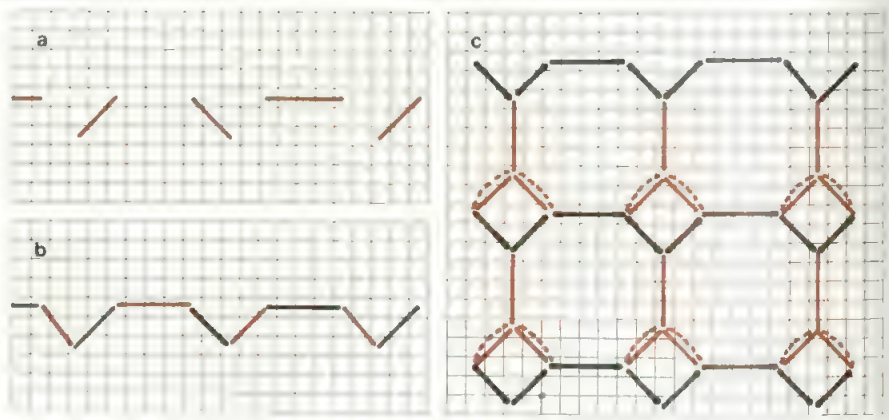


Creating blackwork patterns

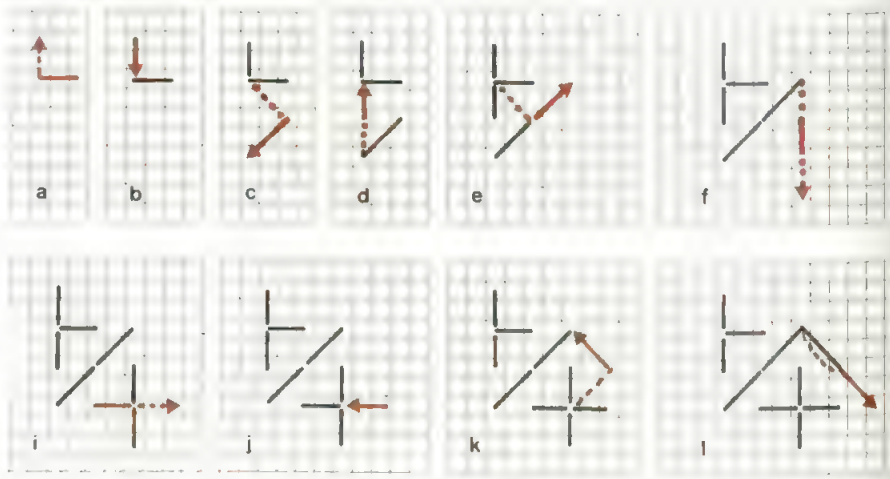
All you need to create your own blackwork patterns are graph paper, a ruler and a sharp-pointed pencil. Work on the basis of one line on the graph equalling one thread of fabric and draw the patterns using basic geometric shapes from which you can develop



1a. *Working in straight lines.* **1b.** *Completing the basic grid.*



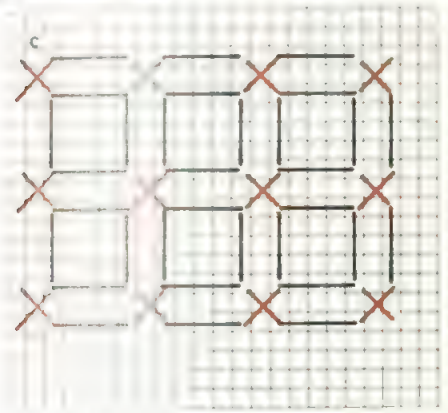
2a, b. *Straight and diagonal lines.* **2c.** *Completing the basic grid.*



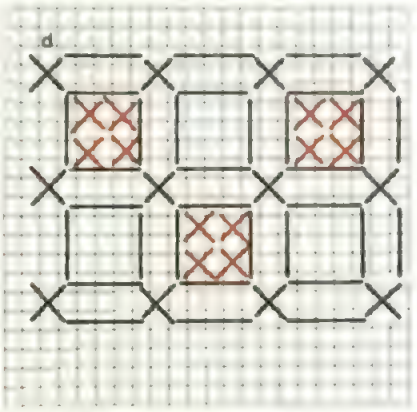
3a-o. *Step by step to building up individual units by working in circular movements. This pattern could have been worked in lines to form the grid although it would need long stitches on the wrong side, but by stitching*

intricate and interesting patterns.
In order to stitch continuously round the design so that you do not waste thread, you can work straight lines to form a plain grid (fig.1), or straight lines including diagonals (fig.2) or you can move in continuous circles (fig.3) for complicated patterns.

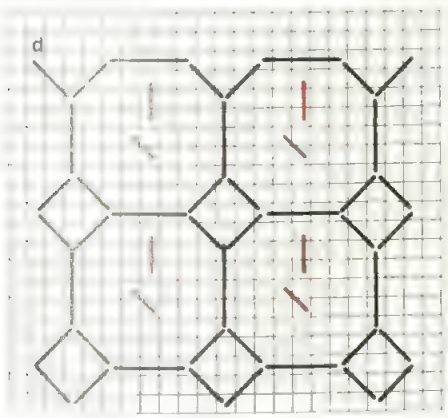
Threads of fabric
New stitch on right side
New stitch on wrong side
Direction of stitch
Back stitch
Detached chain stitch
Stitch already worked



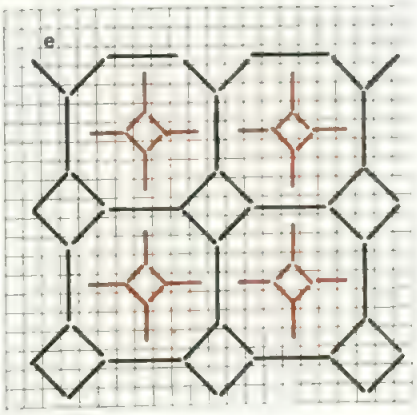
1c. *Filling in with cross stitch.*



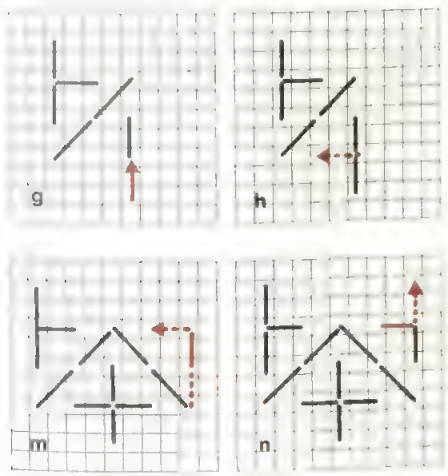
1d. *The complete pattern.*



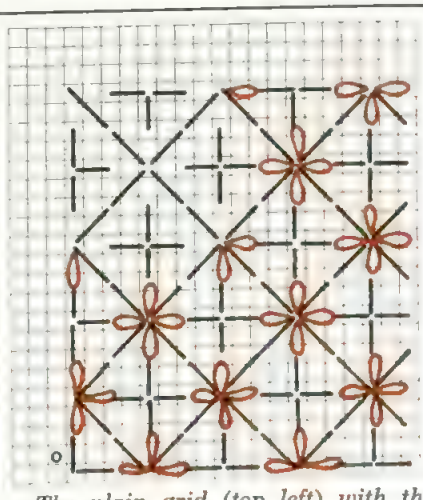
2d. *Starting the inner grid.*



2e. *The complete pattern.*



complicated patterns in circular movements you can work more quickly and use less thread.



The plain grid (top left) with the pattern completed by rosettes of detached chain stitch.

and give a good playing surface for chess, and then framed. The materials given below are for a chess-board 40cm (16″) square, excluding the border, with 5cm (2″) individual squares.

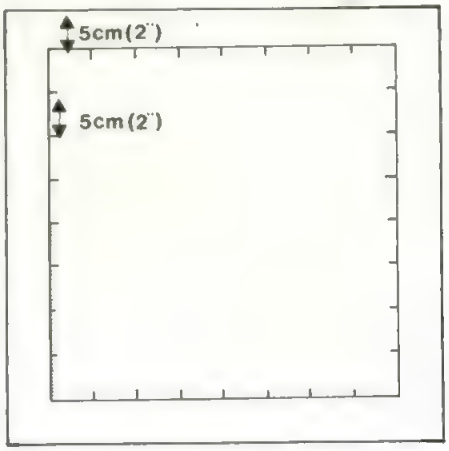
To work the embroidery

You will need:
Evenweave embroidery fabric, 60cm (24″) square, with 18 threads per 2.5cm (1″).
Threads, pearl cotton, one 10gm ball No.5 and two 10gm balls No.8 in black, seven reels twisted silk.
Tapestry needles, No.26 for silk thread and No.22 for pearl cotton.
Plywood 50cm (20″) square (this can be larger if you want a wide frame).
Staples and staple gun.
Glass and framing materials.

☐ First, check that the fabric is cut on straight grain or straighten if necessary.

☐ Find the centre of each side of the fabric by folding it in half and marking the fold at each end with a few tacking stitches. Open out the fabric, refold the other way and mark the fold again.

☐ Starting at the centre, and 10cm (4″) in from the edge on one side, start by outlining the shape of the board in back stitch, using the No.5 pearl cotton and working each stitch over three threads of the fabric. At 5cm (2″) intervals all the way round on the back-stitch border, work a single stitch of the same size at right-angles and facing inwards (fig.4) to indicate



4. *The grid for the chess-board.*

the grid for the squares (if you do this there will be no need to recount the threads). Complete the grid by joining up the single stitches in lines across the board.

☐ Work the patterns of your choice, using different threads to give variety. Work the border to the size you require.

Making up. Press the embroidery on the wrong side. Stretch over the plywood and secure on the wrong side with staples. Cover with glass and frame.

Ornamental painted biscuits

Special occasions call for special food. From the cook's point of view it is certainly pleasing to create dishes that look and taste exciting, but all too often this involves expensive ingredients.

For the wise cooks of southern Germany a festive occasion means baking a batch of special biscuits. This is an idea well worth consideration. Baking and decorating biscuits is fun. The

results can look spectacular, enough to tempt even those who claim not to have a 'sweet tooth' and—an added bonus—the cost of ingredients will not run over housekeeping budget!

The biscuits illustrated here, a specialty of Baden-Wurttemberg, are particularly charming. Coated with royal icing and decorated with brilliantly coloured dyes, the relief design biscuits look like painted clay tiles—and, if you make holes through them, they can be hung up to be admired just like real wall plaques.

Carefully wrapped to prevent breakage, painted tile biscuits will keep well for a week if stored in an airtight container; if kept on display, however, they will lose their crispness and pristine looks more rapidly.

Personalized presents

Special moulds can be bought in Germany for making these biscuits. The moulds are not readily available in other countries but it is quite simple (and more creative) to make these delightful miniature works of art without moulds.

Your biscuits can be unique—personally designed for the recipient. You can have fun thinking up ideas for individual people and special days. A stork carrying a baby to celebrate a christening, wreaths of holly for Christmas, romantic motifs on heart-shaped biscuits for St. Valentine's day or an engagement party, a smiling sun face to mark the first day of summer holidays, the interwoven initials of the happy couple for a wedding party, a sign of the zodiac for a birthday are just a few ideas.

Raised dough designs

The shortcake biscuit recipe given in Edible arts chapter 2, page 1218, is ideal for making painted tile biscuits.

If you wanted to, you could make your own clay moulds but raised surfaces can easily be obtained by decorating basic biscuit shapes with extra dough, rolled or cut into patterns of your choice and pressed on to the biscuits before cooking.

Butter moulds, unlike tile biscuit moulds, can be bought in most countries and there is no reason why they should not be used to make pretty dough motifs for superimposing on basic biscuit shapes. Sprinkle the mould generously with flour then tap gently to release excess flour. Press the mould firmly into the dough and remove carefully. Dust off any flour adhering to the dough shape.

Left: special moulds were used to make these traditional German biscuits. The raised designs were iced, then brightly painted with edible dyes.

Alternatively, raised dough decorations can be made with small fondant cutters (for example to obtain really accurate crescent and star shapes).

You can also cut dough shapes with a round-bladed knife—using freehand designs or following trace pattern templates made from your own sketches or pictures taken from magazines.

You can also roll the dough in your hands to make rounded strips or little balls.

Whichever method or combination of methods you choose, it is sensible to make the biscuits about 7.5cm to 10cm (3″-4″) across—because very small biscuits are fiddly to decorate and can look messy rather than ornamental.

Equally it is wise to keep the dough decorations fairly simple. Very intricate relief designs (such as one or two of the German moulded figures photographed here) are complicated to execute successfully without moulds.

Roll out two-thirds of the dough until 6mm (¼″) thick. Cut out the basic biscuit shapes and place on baking trays. If you want to hang the biscuits, use a largish wooden or metal meat skewer to make a hole (or holes) in each biscuit through which decorative ribbon or string can be threaded later.

Roll out the remaining dough (this time thinner) and make your relief decorations. Use your finger or the

To make raised designs for your own ornamental biscuits, roll small pieces of dough by hand, cut trace pattern shapes, use shortbread moulds, butter moulds or cutters. It is also worth looking round antique and junk shops for old biscuit moulds.

Below: a festive display of biscuits.

Camera Press

back of a knife to press the decorations firmly into position on the biscuits.

Painting the biscuits

Once the cooked biscuits are cold, extra ornamental effects can be added. First apply an overall layer of royal icing. When that has thoroughly dried (allow several hours or preferably leave overnight), there is the fun of painting on the finishing touches. This is a real chance to use your creative skills with colours.

It is of course essential to use edible dyes *not* paints to colour your biscuits. Buy a selection of vegetable-based food dyes from your local supermarket or pharmacy, and two or more paint brushes from an art shop. You will need a medium fine brush for colouring large areas and a finely tapered one for subtle shading and adding details which are too intricate to be clearly defined in dough.

Treat the biscuit just like a canvas, dipping your brush into the dyes and painting the colours on to the thoroughly dried royal icing.

Vegetable-based food dyes usually come in fairly standard colours, but you can create your own shades by blending a drop of one colour with a drop of another. Use a saucer as your palette and experiment.

A few drops of food dye can also be stirred into a stiff royal icing for colourful piping if you want to increase the relief effect of your biscuits.

Allow the colouring to dry thoroughly before threading the biscuits with ribbon or decorative string. Then relax and enjoy looking at, and eating, your miniature works of art!

Royal Icing

You will need:

1 egg white.

175gm-225gm (6oz-8oz) icing sugar (also known as confectioner's sugar), sifted.

Strained lemon juice, as required.

☐ Place the egg white in a medium-size bowl and beat to a foam with a wooden spoon.

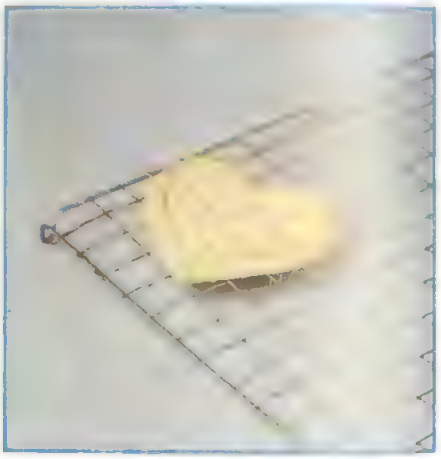
☐ Add icing sugar, a tablespoon at a time, beating well after each addition. Continue adding icing sugar until the icing stands in firm peaks.

☐ If the icing is not required for immediate use, cover the bowl with a damp cloth to prevent a crust from forming.

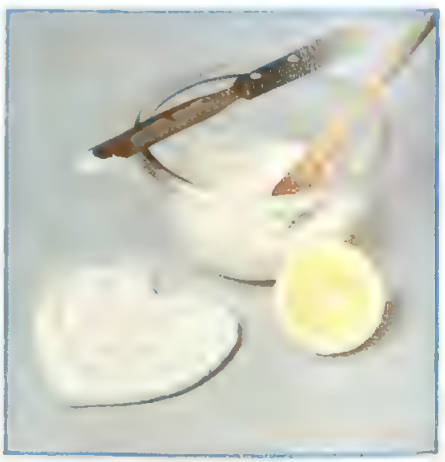
☐ Just before using, stir in enough lemon juice to make a coating consistency.

Right: designing individual biscuits for specific people and special occasions is creative fun. Keep raised dough designs boldly shaped. Add delicacy and detail with paint brush and edible dyes after baking.

Use a finger or the back of a knife to press dough relief decorations firmly into basic biscuit shapes before cooking. Pierce biscuits with a skewer to make holes for threading with decorative ribbon or string.



Cooked biscuits are left to cool on a wire rack. Don't attempt to start decorating until they are quite cold.



Dirk Muller

Using a round bladed knife or spatula give each biscuit a smooth coat of royal icing. Leave overnight to dry.

Victoria Drew

Right: take care to avoid smudging when painting. Colour background and large areas first, then details. Inset: decorations completed, your tile biscuit is ready to be admired.

Hinged cubes

Design know-how 4.5

Many three-dimensional models can be made from card which is capable of bending into all sorts of flexible shapes and tough enough to stand up to a fair amount of use. In this and the next two chapters several models are made which are both attractive and graceful in their own right, and which could form the basis for other, more complicated, versions.

Two hinged cubes

These two cubes are made from eight identical shapes joined together. The cubes are then taped to form a rectangular solid which can be opened out to make a number of interesting shapes. Paint or decorate the faces of the cubes afterwards.

You will need:

Thin white card, 50cm x 25cm (20″ x 10″).
Sheet of white paper.
Transparent adhesive tape such as Sellotape.
Rubber solution adhesive such as Gloy Studio Gum.
Ruler, pencil, a pair of compasses, scissors.

☐ Mark out eight 12.5cm (5″) squares on the card.

☐ Find the centre of one square and draw a horizontal line across it. Using a pair of compasses bisect this line to make a vertical line through the intersection. Mark the intersection O.

☐ With centre O draw a circle of 5cm (2″) radius (fig.1). Mark in ABCD. Join up points AD, AC, CB, to form three triangles. Only mark lightly with your pencil.

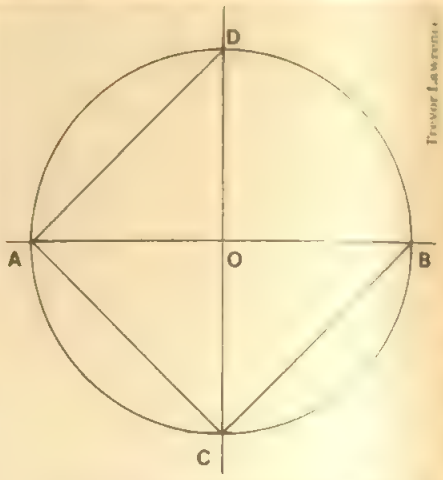
☐ With radius 4.4cm (1¾″) draw arcs from points A and D to intersect at X (fig.2). Connect AX and DX. Repeat at points A and C and at C and B.

☐ Draw 0.6cm (¼″) glue flaps on to sides AX, DO, BZ and CZ and mark 1, 2, 3 and 4 as indicated in fig.3. Number the sides 1, 2, 3 and 4 as also shown in fig.3.

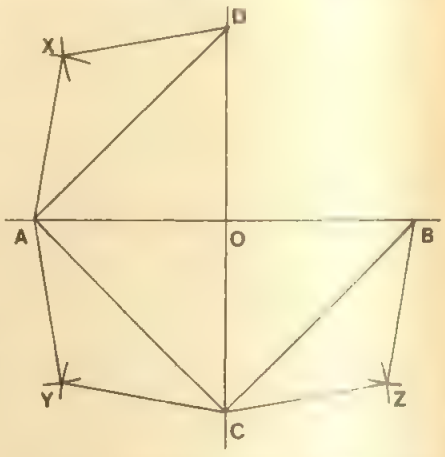
☐ Draw seven other identical shapes in the other seven squares.

☐ Cut out the shapes.

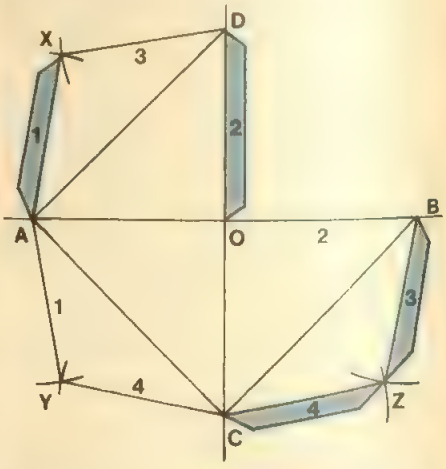
The next chapter shows how to fold and stick the eight shapes; these identical shapes are bound together in fours to make two cubes hinged together with glued paper.



1. *The eight basic shapes to make the cubes are initially based on a square and its internal triangles.*



2. *Three smaller triangles are drawn from the outside edge of the first three triangles.*



3. *Each glue flap corresponds to another edge and will be stuck to its 'partner' to make a three-dimensional shape.*

Left: the finished cubes: both cubes are hinged together and each cube will either close or open up to reveal its inner faces which can be coloured or decorated to your choice. Designed by Vic Duppa-Whyte.

Melvin Grey

Creative ideas 45

Camera Press

Unusual wrappings made by clever use of materials.

Colourful wrapping

From plain brown to vivid purple, coloured tissue paper lets your imagination run riot wrapping gifts.

Beginning with the simplest parcels shown, cocoa brown and pumpkin orange tissue is used in a straight forward manner and bound with sisal twine. The combination of rough twine and smooth paper produces a sophisticated package accented by a splash of shiny red sealing wax.

An excellent method of wrapping a print or drawing is to use a cardboard tube. Wrap it smoothly in tissue and carefully tuck the overlap at each end into the tube. Now make pleated pompons for the ends by placing several sheets of different coloured tissue together, then fold in half across the width and accordion-pleat the paper with the fold along the top edge. Cut the folded paper into equal sections across the pleats, unfold them, gather the ends together to form a pompon and secure by wrapping tightly with adhesive tape. Push these ends into ends of the tube.

Another simple decoration is a cut-out from a heavier weight paper in a contrasting colour. First wrap the parcel in tissue, then centre the cut-out on the front and stick in place. Now wrap ribbon around the parcel along the edges of the cut-out paper.

When using tissue paper double-sided sticky tape is recommended as it is tidier than either glue or ordinary sticky tape.

Adding frills to festive crackers

Once you master the basic technique of making and decorating crackers, as described in the previous chapter, you will feel confident and able to extend the art of cracker making.

The frills and extra embellishments suggested here are simply added to the basic crêpe crackers already described, but the results are very rewarding—unique and spectacular crackers quite unlike shop-bought crackers.

Children like essentially colourful and dramatically simple designs. They are eager recipients of crackers and likely to be especially delighted if their crackers are ingeniously designed to echo the theme of a party.

By altering the traditional trumpet shaped cracker ends and experimenting with additions to the central cylindrical shape, a cracker can be transformed into all sorts of objects. For instance, pipe cleaner legs and lacy paper wings will turn crackers into honey bees, butterflies and creepy-crawlies from the insect world; while cardboard wheels and funnels can be used to make trains and steam ships.

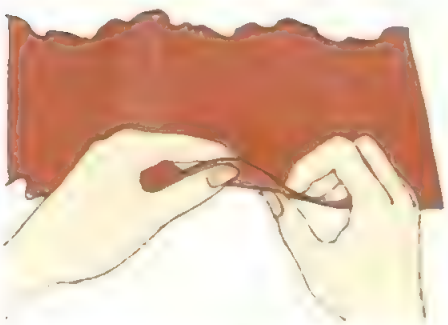
Clown crackers

These simple but charming crackers would be a particularly suitable choice for a party using the circus as its central theme. A child could make the faces while you prepare the frills.

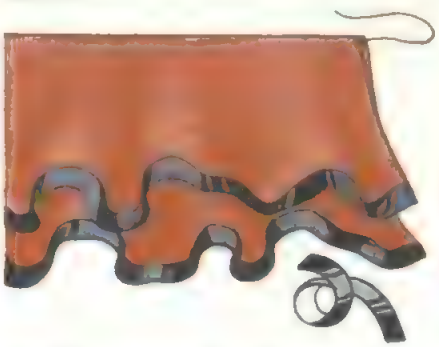
You will need:

Basic white crêpe crackers (see Paper chapter 32, page 1234).
Coloured crêpe paper and white card.
Coloured card, preferably with a metallic finish.
Decorative adhesive tape, preferably with a metallic finish.
Pre-gummed geometric paper shapes.
Button thread.
Paper adhesive and a pair of compasses.
Ruler, pencil and scissors.

☐ Cut a piece of crêpe paper measuring 70cm x 20cm (27″x 8″) with the grain running parallel to the short ends of the paper. Frill the long ends by stretching the edge of the paper lightly with fingers and thumb.



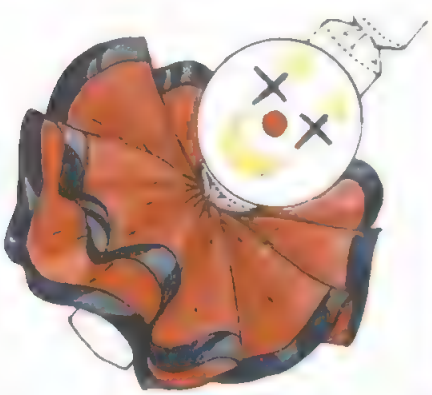
☐ Lay the piece of crêpe horizontally on the worktable and fold it widthways so that the bottom frill is 11.5cm (4½″) deep and the top one is 8.5cm (3½″) deep. Stick decorative adhesive tape along the edge of each frill as shown.



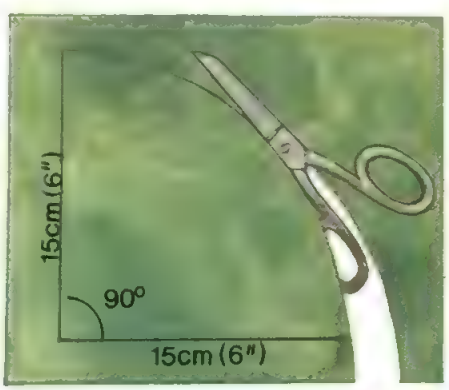
☐ Place thread in the crêpe fold. Gather the frills as tightly as possible and tie them round one of the chokes of the basic white cracker.

☐ Separate the frills, which should be substantial enough to stand the cracker upright.

☐ Cut a circle 9cm (3½″) diameter in white card, decorate with pre-gummed geometric shapes to make the clown's face and stick into position on the central cracker cylinder close to the frilled choke.



☐ Finally, make the clown's hat from a fan-shaped piece of coloured card. Draw two 15cm (6″) long lines meeting at a right angle. Then use a compass set at a radius of 15cm (6″) to form the arc, and cut out your card accordingly.



☐ Roll the card into a cone shape. Glue along the overlap and stick together.

☐ Place two small dabs of glue inside the cone hat and stick the hat into position over and around the undecorated trumpet shaped cracker end.

Barbara Firth

Melvin Grey

Jerry Tubby

Dinner party crackers

Don't think that crackers are for children only. Sophisticated and beautifully designed crackers can add to the glamour of your dinner party table and give great pleasure to every age group. Used in place of the more conventional vase of flowers, crackers can make a pretty table centrepiece. Individually labelled and placed by each setting, they can act as place names for your seating plan. In either case, crackers can provide a delightful means of offering each guest a small gift.

Blue and white crackers

Colour schemes that blend with the décor or your dinner service look very attractive, so choose your papers accordingly and use a variety of textures, as shown, for a rich look.

You will need:

Basic white crêpe crackers.
White crêpe paper.

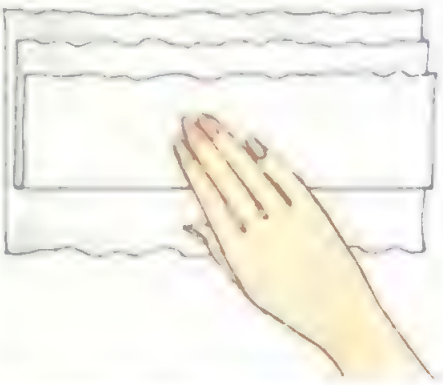
Sophisticated crackers stylishly complement a dinner party atmosphere. Blue, white and gold echo colours of the elegant china. Velvety flock accentuates the crispness of the crêpe frills.

Royal blue flocked paper.
Gold glitter, or gold paint and a fine paint brush.
Gilt braid or paper with a gilt finish.
Button thread.
Scissors, ruler and paper adhesive.

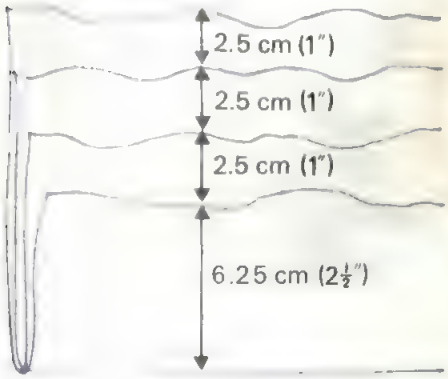
☐ Cut the crêpe into pieces measuring 35cm x 20cm (14″x8″) with the grain running parallel to the short ends of the paper. Each cracker will need four pieces.

☐ Frill the long ends of two pieces of crêpe.

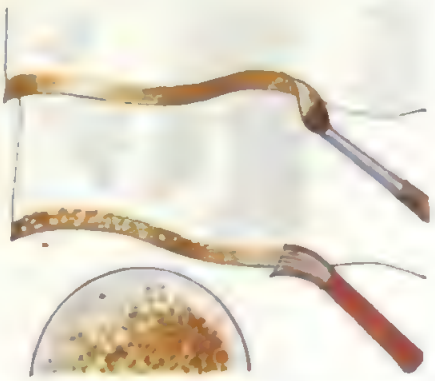
☐ Fold one piece of crêpe so that one frill lies 2.5cm (1″) below the other one. Then place the folded crêpe on top of the second piece, positioning it so that 2.5cm (1″) of the second piece of crêpe shows above the top frill of the first piece.



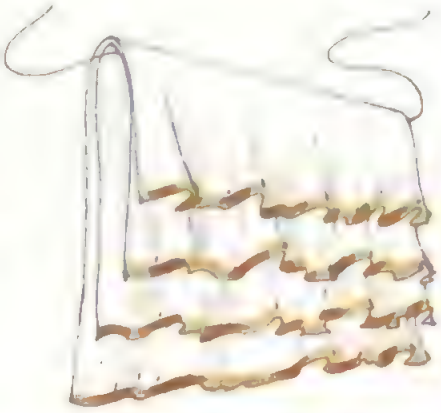
☐ Finally fold up the bottom of the second piece of crêpe over the first fold as shown.



☐ Now separate the papers and decorate the frilly ends. Either brush a little glue along the edges, then dip into a saucer of glitter, or use paint and brush for gilt edging.

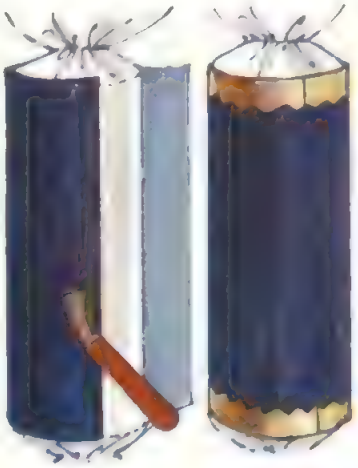


☐ When quite dry reassemble the frills and place button thread inside the common fold.



☐ Gather the frills as tightly as possible into an arc shape and attach to the choke of the basic cracker by tying a firm knot.
☐ Repeat the entire process to decorate the other end of the cracker.

☐ Cut flock paper to cover the central cylinder of the cracker, allowing a little overlap, and glue into position around the cracker.
☐ Cut a length of braid or gilt paper and glue into position around the ends of the flock paper cylinder.



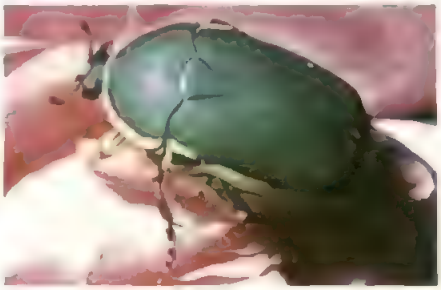
☐ Your beautiful frilly cracker is now ready for final motif decoration—perhaps a fresh buttonhole flower or the gilded initials of your guest pinned to the central cylinder.

Barbara Firth

Glass fibre beetle to make

Glass fibre, coated with resin, is a very strong material capable of being moulded into such objects as a tray or lampshade or, as in this chapter, wrapped around a wire frame to make a free-standing sculpture. A glass fibre and wire structure is strong and can be quite large and imposing; it could be the right material when making theatrical props for example.

Chicken wire is a very good base for a glass fibre covering. The wire can sometimes be removed or left as an integral part. This wire is strong but flexible and has the advantage of being inexpensive and easily available (fig.1). When used with care chicken wire can be persuaded to take on all kinds of forms and shapes. Any shape can be visualized as starting from a cylinder. More complicated shapes should be broken down into simpler cylinders. The wire can then be squeezed together to make a narrow shape or pulled out for a wider shape. The process of manipulating the wire must be done gently, a few spaces at a time. It will then take on any shape you want (fig.2). A ball is one of the simplest shapes to make from chicken wire and you will probably find it useful to practise this and a few other shapes before attempting anything more complicated.

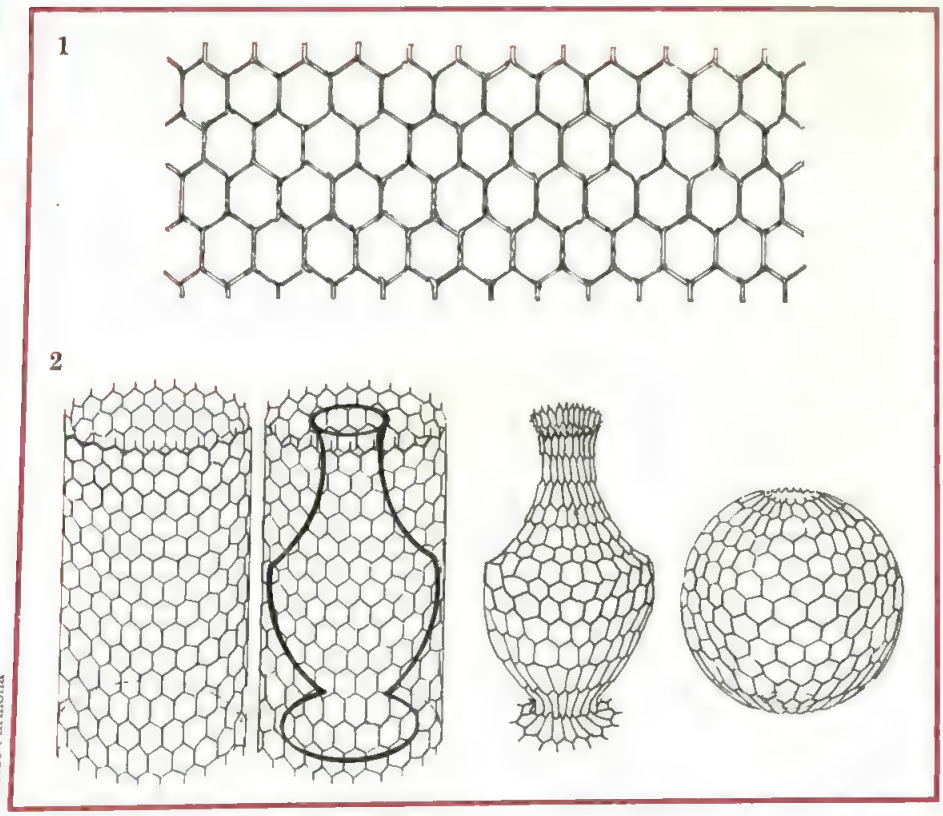


Ardea

Use a picture or drawing for reference.

A beetle

This beetle, similar to a scarab, has a chicken wire frame (later removed) which provides a firm base for a glass fibre and resin shell. The legs are made from galvanized wire which are later stuck to the body.



Terese Carmona

You will need:

Tools and equipment

Wire cutters.
Pair of pliers.
Two paint brushes, 2.5cm-5cm (1″-2″) or one resin laminating brush and one paint brush.
One artist's brush for painting details on shell.
Soldering iron, either a 75-100 watt electric one, or an old-fashioned copper one requiring a gas flame for heating.
Gas burner or bunsen burner if using an old-fashioned soldering iron.
Asbestos mat about 15cm (6″) square.
Scissors.
Trimming knife such as a Stanley knife.
Clean, empty tins for mixing resin.
Disposable, calibrated paper cups for measuring resin.
Smooth stick, flat wooden spoon or palette knife for stirring liquids.
Wire wool or wire brush.
Coarse rasp or file.
Medium and fine silicon carbide abrasive paper.
Overalls or a large apron.
Cotton gloves and barrier cream.
Newspaper.

Materials

Materials are sufficient for a beetle 45cm (18″) long.
Chicken wire, 45cm x 60cm (18″x 24″) and with 1.25cm (½″) mesh.
Drawn galvanized wire, about 2.5mm (gauge 10-12) thick and 3.6m (12′) long.
Thinner drawn galvanized wire, about 1mm (gauge 18-19), 0.9m (3′) long.
Resin cored solder such as Ersin Multicore (ordinarily used for electrical work).
Laminating resin, 450gm (1lb).
Gel resin or thixotropic resin filler suitable for filling car body repairs, such as the Bondafiller kit: 226gm (½lb).
Catalyst: you will need less than half of a 56gm (2oz) bottle but check manufacturer's instructions.
Chopped strand mat 90cm (1yd) wide—buy a 28gm (1oz) or 56gm (2oz) weight.
Twelve sheets of white tissue paper. Buy good quality (acid-free) paper used by jewellers.
Paper paste such as Polycell.
Cellulose primer such as Bondaprimer.
Red flock for sprinkling on legs.
Spray paints in the colour(s) of your choice: cellulose car spray paints are suitable, or enamel paints for painting by hand.
A roll of masking tape is useful if you intend to block off part of the shell before spraying.

1. *Chicken wire is strong and flexible, making a good frame for glass fibre.*
2. *Start with a chicken wire cylinder then mould and squeeze it into the required shape.*

Glass fibre back, wire legs, and chicken wire frame for beetle.

☐ Look at a photograph or drawing of a beetle and draw a plan view and side view on a piece of paper to actual size, 45cm (18") in this case.

☐ Lay out newspaper with tools and materials. Put on cotton gloves and an overall.

The wire frame. Using the wire cutters cut the chicken wire across the grain (the twisted section is the grain) to make a length 60cm x 43.75cm (24"x 17½"). In other words cut 1.25cm (½") off the bottom of the piece of wire.

☐ Trim off the stiff edge wire (which is like a selvedge in fabric) along each edge. Leave the thin wires which are cut through as long as possible.

☐ Straighten out the cut side wires and, bending the chicken wire round, twist these together to make a cylinder. Take care to join the wire so that the rows of mesh line up.

☐ Start to mould the beetle by drawing the wire together symmetrically to form the head. Work gradually and slowly and check that it is correct against your drawings. Put your hand inside the opposite end to smooth out any irregularities in the wire.

☐ Continue to work the wire until you have the correct shape. Push the underside of the beetle in and out of the way and concentrate on the top and sides until the wire is as smooth as possible. The underside will not be covered with glass fibre. The more regular the top surface, the easier will be the later stages.

☐ Mix up some paper paste and, with a paint brush, apply a thin flat layer of pasted tissue paper over the top surface of the wire.

Once the first layer has stuck and partly dried the filling of the irregular surface can begin.

☐ Paste more paper and arrange this over the first layer in a slightly wrinkled covering. Do not squash down but cover with more pasted paper used flat this time and gently smoothed down using the ferrule (or metal band) of the paint brush. This technique will plump out the hollows in the wire.

Allow to dry thoroughly.

The glass fibre shell. Open windows for good ventilation and cover hands with barrier cream.

☐ Cut out a piece of chopped strand mat a little larger than the area of the wire and tissue paper.

☐ Mix up 340gm (12oz) laminating resin with catalyst at 10 drops per 28gm (1oz) resin.

☐ Using a paint or laminating brush thinly apply the catalyzed resin to the tissue paper. When the paper is completely covered place a layer of glass fibre over it. Impregnate the fibre with more resin using the brush in a stippling action. Apply more fibre (leaving a few scrap pieces), teasing it out to fit the shape of the wire. Add enough resin to thoroughly coat the fibre but no more.

☐ After the resin has lightly gelled—about half an hour—trim the edges with the trimming knife.

Leave to harden overnight.

☐ Remove the wire from underneath the glass fibre to leave a hollow shell. Most of the tissue paper will come out with the wire, leaving a few unimportant shreds behind.

The surface of the shell can now be filled in with gel resin or thixotropic resin. This will create a smooth finish.

☐ Mix up 170gm (6oz) resin with catalyst at 10 drops per 28gm (1oz) and apply. Leave to harden.

☐ When the resin is quite hard finish off with a rasp or file. Finally, rub down with medium then fine abrasive paper.

Geoffrey Frosh

Paint the beetle to fit in with your colour scheme. The finished beetle will add an interesting, slightly bizarre look to your living room.

The legs. Follow the plan in figs. 3 and 4 and, using the pliers, bend the thicker galvanized wire into shape, cutting where necessary. Wrap the thinner wire around the thicker wire to hold the structure rigid. There is no need to stick strictly to the plan for the legs as it is a guide only.

Soldering. The wire legs will need to be soldered together to make a firm, strong construction.

☐ Clean the join areas of the legs with a wire brush or wire wool. This is important otherwise the solder will not adhere well. Also clean the end of the soldering iron with wire wool.

☐ Heat up the soldering iron. An old-fashioned iron can be heated over a bunsen burner or the flame of a gas cooker; an electric iron can be plugged into the household mains electricity supply. Always lay a hot soldering iron on an asbestos mat, never directly on to the unprotected working surface.

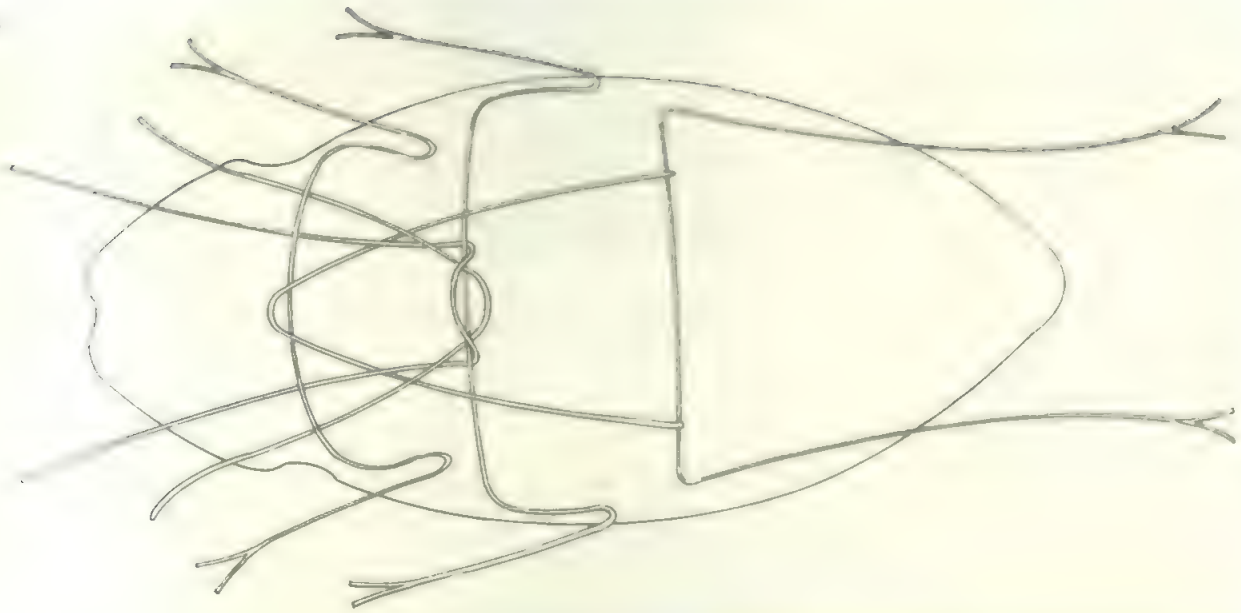
Achieving and maintaining the right temperature of iron takes a little practice. Test for the proper temperature by melting a little solder and, when it starts to flow, you will know you have reached the right temperature. Turn off the electric iron occasionally to stop it overheating.

The beetle looks alarmingly real.

☐ Place the solder over the join and touch with the soldering iron so that a drop of solder falls on the join. Spread smoothly over the join with the tip of the soldering iron. Do this to all the joins, soldering on both sides.

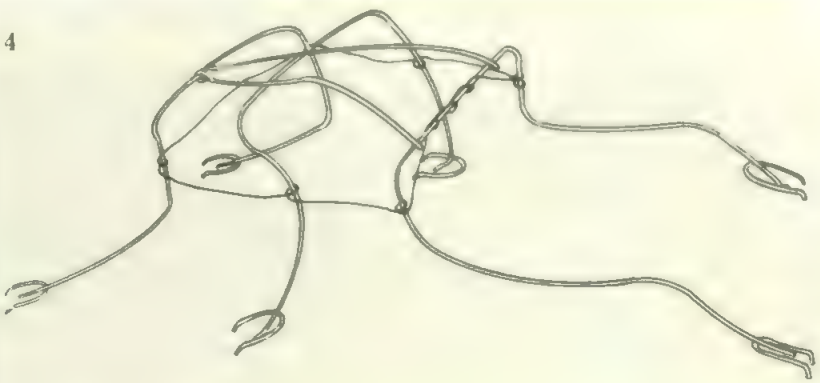
Once the legs are soldered together they will be firm but thin. Build up the legs with 'muscle' by wrapping a little chicken wire around them and covering with tissue paper as before or by building up with tissue paper and paste alone.

3



3. *The underside of the beetle showing how wire is bent to form the legs.*
4. *Once the wire has been bent to shape it is soldered together.*

4



Mix up 56gm (2oz) laminating resin with 20 drops of catalyst and coat the legs. When hard finish off with 56gm (2oz) catalyzed gel resin or thixotropic resin.

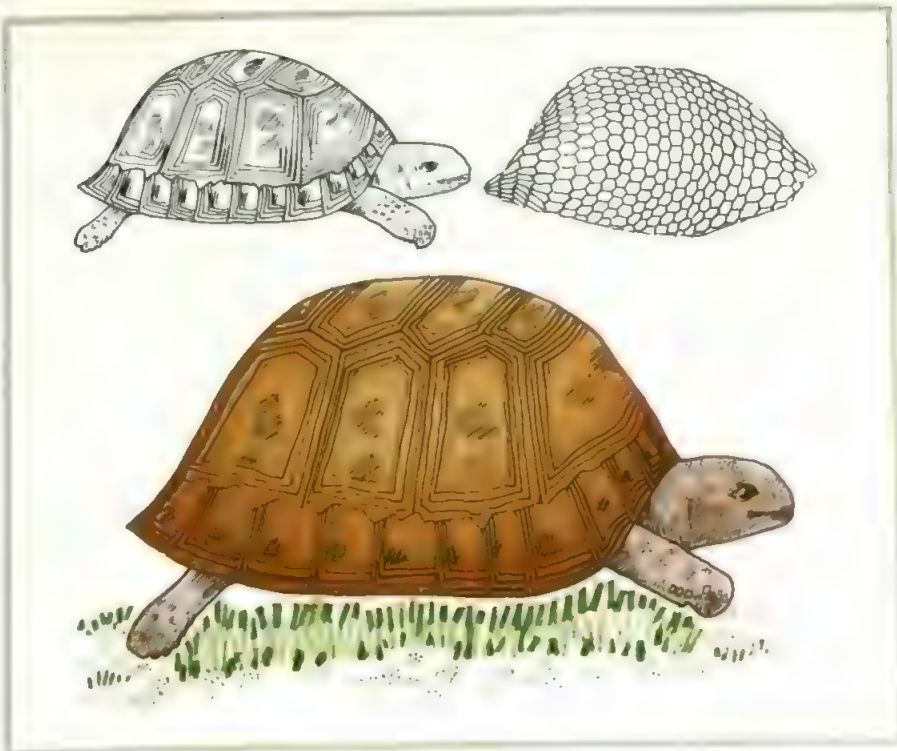
☐ Apply a thin layer of cellulose primer over the legs as an adhesive and shake the flock over the legs. The flock will stick to the legs giving a realistic, hairy appearance.

Finishing. Lay out clean newspaper and spray the legs black with a paint spray.

☐ Spray the shell with colour. Use the masking tape, if needed, to block off areas you wish to remain uncoloured or for any hard-edge painting. Finally, fix the shell to the legs.

☐ Mix up the remainder of the laminating resin with catalyst. Lay strips of chopped strand mat across the top of the legs and on to the underside of the shell. Coat with resin. Position and adjust the legs if necessary before the resin sets hard.

Once you have had a little experience with this chicken wire and glass fibre technique you will be able to make all kinds of projects: for example, a duck or a sheep, a tortoise, a dinosaur or any other creature which takes your fancy. Remember that glass fibre and wire is hard wearing and waterproof and will easily stand up to outdoor conditions.



The shell of this tortoise is made separately, then placed over the head and legs. The eyes, mouth, scales and other characteristics are painted on.

Terese Carmona

Fur fabric for soft toys

Cloth — page 7

Toys in fur fabric have a special charm. Don't let the size of these toys deter you! The shapes are simple and instructions are easy to follow.

Keep the pile running downwards to give a realistic feeling to the fur.

The donkey and lamb measure 91cm high and 91cm long (36″x 36″) without the tail.

Should a smaller size be preferred (for instance half the above measurement) make the size of the squares about 2.5cm (1″) on the graph. The donkey and lamb will then be about 45cm high and 45cm long (18″x 18″).

Working with fur fabric

Always cut one layer at a time, working from the back and cutting with a razor blade. Work on a square of hardboard if possible to avoid scratching your work surface.

If the pile is long, seams are easier to sew if the pile is shaved away from the seam allowances. Otherwise you can pull out the pile with a pin afterwards. A silicone spray on the throat plate of your machine helps prevent sticking.

1. *Right: graph pattern for donkey and lamb.*

To make the donkey

You will need:

2.7m (3yd) of 152cm (60″) fur fabric.
Piece of black felt 60cm x 33cm (24″x 12″).
Scraps of black and beige felt for eyes.
Piece of calico 33cm x 36cm (13″x 14½″).
Matching sewing thread.
2.25kg (5lb) soft kapok or synthetic filling.
50gm (1¼oz) thick knitting yarn for mane.

☐ Make a pattern for the donkey from the graph given (fig.1). One square = 5cm (2″) square.

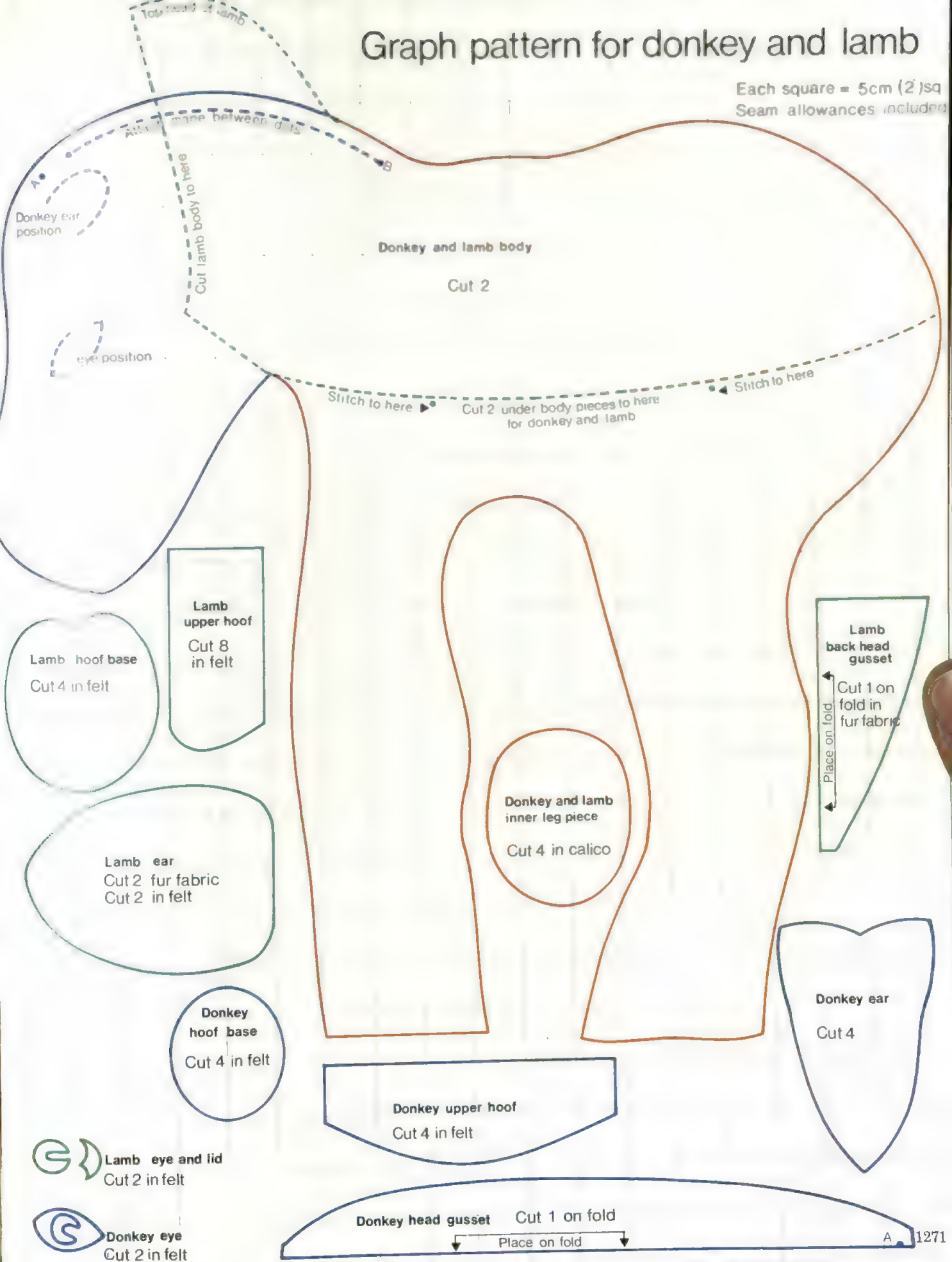
1.2cm (½″) seams have been included in the pattern.

Children will love to play with this floppy, furry giant donkey.

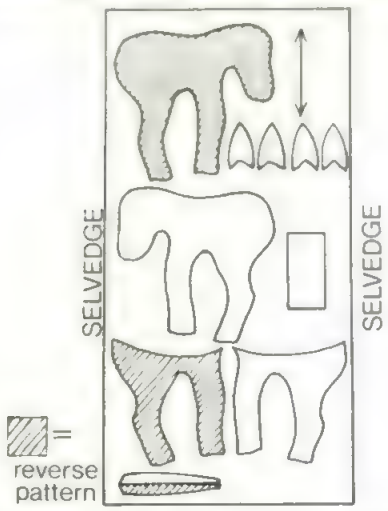
Trevor Lawrence

Graph pattern for donkey and lamb

Each square = 5cm (2")sq
Seam allowances included

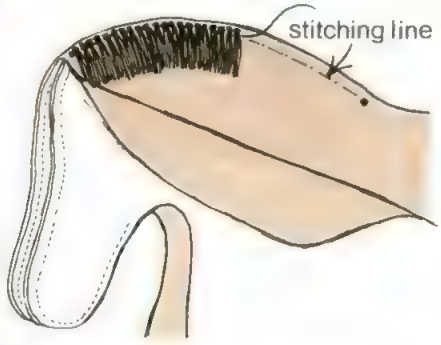


☐ Following the layout (fig.2) cut out two bodies, two underbodies, one tail, one head gusset, four ears from fur fabric making sure the pile of the fur runs down each piece in the same direction. Cut both hoof pieces four times each from the black felt. Cut out the four inner leg pieces from calico.



2. *Fabric layout for donkey and lamb.*

☐ Take 1.2cm (½") turnings throughout. Starting at point A on head pin the head gusset to the two body pieces with right sides together and stitch down each side.
☐ Cut the knitting yarn into fifty 152cm (60") lengths and fold each in half four times. Knot one end of each bundle. Place the knots to the raw edge of the back on right side of one body piece between the points marked, with fringe pointing inwards. Tack along the stitching line (fig.3).

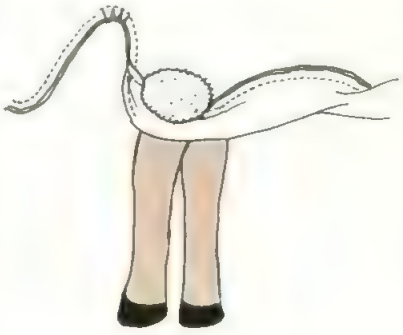


3. *Mane being tacked into position.*

☐ Pin the two body pieces with right sides together and stitch from the tail end to the head gusset taking in fringe and the short neck seam. Clip the curves carefully.
☐ Place the two underbodies right sides together and stitch from each end of tummy seam to the dots. This leaves an opening for the stuffing.
☐ With right sides together pin the underbody to the bodies. Stitch around front and back legs from the tail to the neck seam on both sides, leaving openings for feet. Clip the curves carefully (fig.4).

4. *Underbody stitched to body.*

☐ Stitch the back seam of each upper hoof and press open. Pin and stitch the hoof pieces to the bases. Trim turnings. Turn hooves to the right side.
☐ With right sides facing stitch the hoof to the bottom of the leg, matching back seams. Repeat for other hooves.
☐ Turn the legs through to the right side and firmly stuff to the top of each leg. Pin calico inner leg pieces to inside top of the legs to prevent the stuffing escaping into the body. Stitch firmly, working through opening (fig.5).



5. *Calico leg piece sewn in place.*

☐ Turn the main body through and stuff the head firmly and the main body lightly. Ladder stitch the opening in underbody.
☐ With right sides facing stitch each pair of ears together leaving the bottom edge open. Turn through and turn in the raw edges. Fold ears lengthways, catching centres together and stitch to the top of the head on each side.
☐ With right sides facing fold the tail in half and stitch the long seam. Run a gathering thread around the bottom edge of the tail and pull up the gathers tightly. Stitch across gathered ends to prevent the stuffing escaping. Turn to right side. Stuff the tail and stitch it to the back of the body on the seam.
☐ Cut out the eyes in black felt and pupils in beige and stitch the pale half moon shape to the black felt. Stitch the eyes to the head.
☐ Finally, ease the pile from the seams with a pin and trim the mane.

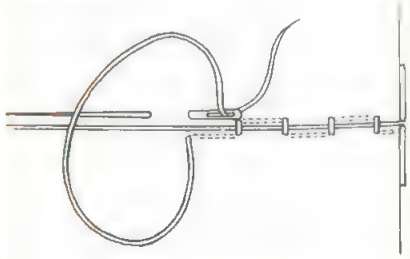
To make the lamb

You will need:
2.8m (3¼yd) of 152cm (60") fur fabric.
102cm (40") of 90cm (36") wide black felt.
Scraps of white felt for eyes.
Piece of calico 33cm x 36cm (13"x 14½").
Matching sewing thread.
2.25kg (5lb) soft stuffing (kapok or synthetic filling).
☐ Make a pattern for the lamb from the graph following dotted lines for head. One square = 5cm (2") square (fig.1).
1.2cm (½") seams have been included in the pattern.
☐ Following layout (fig.2) cut out the two main body pieces, two underbodies, one tail and two ears, also one back head gusset from fur fabric, making sure the pile of the fur runs down each piece. (Reverse direction of ears.)
☐ From the black felt cut out eight upper hooves, four hoof bases, two inner ears, two head pieces and one head gusset. Cut out four inner leg pieces from calico.
☐ Pin and stitch the dart in the felt head gusset, slit open almost to the point and press. Pin the gusset to head pieces matching the dot at the nose and stitch. Pin and stitch neck seam.
☐ With right sides facing pin the fur fabric gusset to point B on the body and stitch in place. Stitch the neck seam on the fur fabric. With right sides together pin and stitch the felt face to the head. Clip curves.
☐ Continue making the lamb as for the donkey, omitting mane, and making inner ears of felt.
Note: hooves have centre front as well as centre back seam.

Cuddly black-faced lamb is made by following the instructions and adapting the pattern for the donkey. Both animals can be made half size or in completely different fabrics.

Basic know-how

Ladder stitch. *Slip the needle through each fold of the fabric in turn, creating a series of straight stitches which should be invisible.*



Barbara Firth

Improvised candle moulds

You can find an amazing number of original candle moulds by scouting around the house: glasses, ice-trays, jelly moulds, plastic cartons and containers almost anything in fact that will not leak or buckle when boiling water is poured into it can be used and, under special circumstances, cardboard and paper can be used as well. Remember, however, that to remove the candle, containers should be larger at the top than the bottom unless they are made of some material such as plastic or glass that can be cut or broken away later on.

General instructions

Casting a candle from a mould basically involves securing the wick, pouring in the molten wax, allowing it to cool and then removing the finished candle. The collection of candles in the photograph was made in improvised moulds using this basic process. (Wax chapter 1, page 52 gives complete information about mixing wax and using dyes.)

You will need:
Paraffin wax.
Stearin
Dye (if colour is required).
Wax thermometer.
Wick, wicking needle.
Mould seal (a special putty for securing the wick).
Wax glue (optional).
Wick sustainer (special weight for holding wick), optional.
Mould

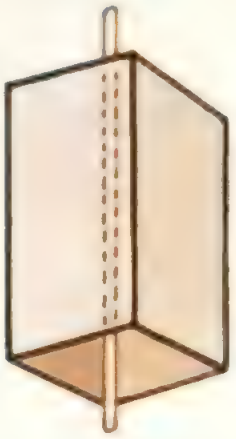
Securing the wick. Containers such as plastic bottles and cartons will need a hole pierced centrally in the bottom of the container with a wicking needle so the wick can be threaded through and attached. In containers which cannot be pierced, such as glass ones, the wick must be weighted or glued to the bottom with a wick sustainer or wax glue or the candle must be pierced with a wicking needle and the pre-stiffened wick inserted while the candle is not quite hard.

Wicking needles, sustainers (little metal discs), and wax glue can, like other candle making equipment, be purchased from candlemakers' suppliers. Small metal washers will also serve as sustainers.

Always choose a length of wick of the correct thickness for the diameter of the mould. Remember that wicks are sold in sizes to correspond with candle diameters so that a candle with a 2.5cm (1″) diameter will require a 2.5cm (1″) wick. If this size wick is used in a fatter candle it will burn only a 2.5cm (1″) hole in it; used in a slimmer candle it will burn too quickly and smoke.

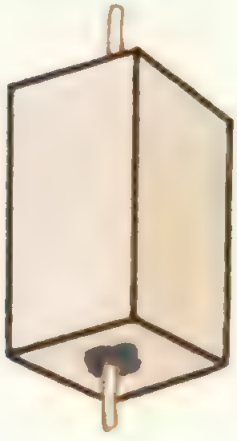
Candles from a variety of improvised moulds: plastic bottles, a balloon, corrugated card, car hose (right) and tumbler (multi-coloured cylinder).

1



1. Pierce hole in the bottom of the mould and wick it up by threading a wax-stiffened wick down through it.

2



2. Seal bottom with mould seal but leave a bit of the wick protruding as this will be the top of the candle.

3

Victoria Drew

3. Tie the other end of the wick around a pencil so that it is taut and properly centred.

If the wick is to be threaded through the bottom of the container (fig.1), wax the wick first by dipping it briefly into molten wax. Then thread the wick down through the hole in the mould.

Seal the wick end on the underside with a dab of mould seal (fig.2). This will eventually be the top of the candle so it is important that the sealed wick end is waxed first so that it will burn properly later on.

Tie the end at the top of the mould around a pencil so that it lies across the top (fig.3).

Casting. Melt stearin and add dye if colour is required. Then add the paraffin wax and heat to 82 C (180 F). Bear in mind that the normal ratio of stearin to paraffin wax is 1 to 10 and 12 tablespoons of wax makes a candle 5cm x 5cm x 6cm (2″x 2″x 2½″).

Pour the mixture into the mould and after a few minutes give the mould a tap to displace any air bubbles that might form.

☐ After about an hour a well will form around the wick as the cooling wax contracts. Prod the surface to break it and top up with more wax reheated to 82 C (180 F).

☐ When the candle is completely cold and hard remove it from the mould, clean it up with a knife and trim the wick to .6cm (¼″).

Candles in glass

These candles are made in the way just explained but you must always warm the glass slightly before pouring in the wax to prevent the container from cracking. Do this by pouring in very hot water or warming over a flame.

If the candle is made in glass like the one shown you should buy a wick sustainer to hold the wick on the bottom of the container. A small metal washer will work equally well so long as the wick can be pulled upright: a dab of hot wax will hold the sustainer in place on the bottom of the glass. Wax the wick by dipping it into the wax and then attach one end to the sustainer.

Bottle moulds present interesting possibilities. You can make a wine bottle candle by filling an old bottle with dark green wax, then wetting the label and sliding it off. When the candle has set, cover the bottle with towels or wet newspaper and break the mould by hammering gently but firmly on the surface. After the candle is removed paste the label on to the front of it. Bear in mind that bottle-moulded candles can be a little tricky because there is a greater danger of air bubbles and when the mould is broken the glass may damage the candle. Practice is necessary and even then every candle will not be perfect.

Cardboard mould

Cardboard can be folded to make a mould (figs.4a and 4b). Embossed wallpaper and stiff paper also give you a range of moulds cheaply and easily. Since cardboard and paper leak when hot wax is poured in, it is necessary to bury the mould in sand. This also helps it to hold its shape (fig.4c).

Place the mould in a box or bucket and gently sift dry sand around the mould, taking care not to distort it in any way.

☐ Since the wick cannot be secured to the bottom of the bucket you must pierce a hole through the centre of the candle when the wax is not quite hard. A wicking needle or knitting needle can be used for this purpose. Then when the candle has set insert a pre-stiffened wick.

Corrugated cardboard candle shown on page 1274 is made by folding a sheet of cardboard diagonally and in sections (fig.4a) so that when the sides are stuck together it forms the irregular shape shown.

Convoluted car hose mould

This unusually shaped mould is made from a hose designed to fit a car radiator. It can be purchased from car accessory suppliers and used over and over. An example is shown overleaf.

☐ Cut the hose down the side with a knife and then tie tightly back together with some string.

☐ Pierce a small hole in a jar lid, invert it and stand the hose in the lid so that the top of the candle will be smooth.

☐ Insert a wax-stiffened wick, pulled tightly, and fix centrally as described in figs.1-3.

☐ When the wax has been poured and allowed to cool, untie the mould and remove the candle.

Balloon mould

This is an unusual, even improbable, idea but, although it is time consuming and requires skill and practice, the result is very rewarding. Because of the time involved cooling the candle at each stage, however, it is advisable to make several candles at a time.

Fill a round balloon with water until it is the required diameter—in this case, about 8cm (3″).

☐ Twist the top of the balloon around your finger to secure and dry the outside carefully.

☐ Dip the balloon into wax containing no stearin or dye and heated to 76°C (170°F). You may have to do this up to 12 times to begin with but with experience half as many dips will be adequate. Allow all excess wax to drip off between each dipping. Immerse the balloon to the same level in the wax each time. If the shell cracks while dipping, the wax is too hot.

☐ Allow the wax to cool for a minute then very carefully let the water out of the balloon. You will be left with a delicate translucent shell. The deflated balloon can easily be pulled out.

Multi-coloured interior is made as follows and an egg poacher is useful to prepare the dyes.

☐ Fill the egg poacher with water and into each compartment put a small amount of disc dye of a different colour. Heat the water until the dyes are melted.

☐ Put a teaspoon of dye into the shell and immediately rotate it as one would a brandy glass. Empty any surplus because the thin shell will distort if a pool of wax or dye is allowed to remain static.

☐ Repeat with different colours until the inside of the shell is decorated to your liking. Handle the shell carefully and blow in it from time to time to keep it cool; it is all too easy to leave fingermarks on a warm shell.

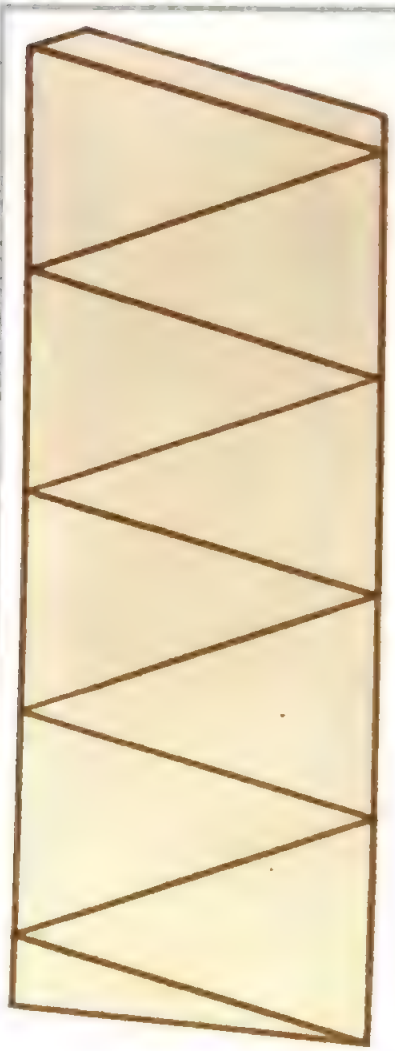
☐ Now add pure paraffin wax, a tablespoon at a time at 88°C (190 F) until the shell is about 8cm (¼″) thick.

☐ Again rotate the shell and pour out any excess to avoid distortion. Do not let the shell rest on a hard surface unless it is quite cold.

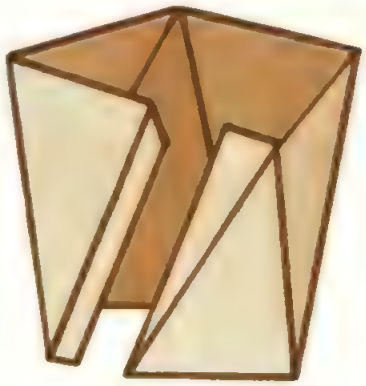
☐ Support the shell by placing it on a drinking glass and suspend a pre-stiffened wick with a wick sustainer in the shell.

☐ Fill the inside with paraffin wax, a tablespoon at a time (about 25 tablespoonsful) and leave the candle to cool for half an hour *each* time, otherwise the shell will break.

Stick-ons. Another way to decorate a balloon candle is to cut out a picture, small designs or ferns and press them against the side of the waxed balloon after the first dip. Subsequent dips will make them part of the translucent shell. Fill the interior as described. The decorations will show through the thin shell and will take on an attractive glow when the candle is burning inside.



4a. *Draw diagonal sections on card.*



4b. *Crease and stick together.*

4c. *Sand supports cardboard mould.*

Victoria Drew

Multi-coloured balloon candles are difficult but rewarding to make.

To make a balloon candle fill a balloon with water and dip it in paraffin wax several times to form a shell.

When wax shell has formed remove the balloon by pouring out water and pulling away the deflated rubber.

Colour the shell by swirling dye round in the interior of the wax shell. Use an egg poacher to hold dyes.

Geoffrey Frosh

Correct tension

The word 'tension' simply means a number of stitches and rows to a specific measurement. In crochet everyone produces her own tension quite naturally, as this depends on how you hold your hook and yarn and how relaxed you are when working a pattern.

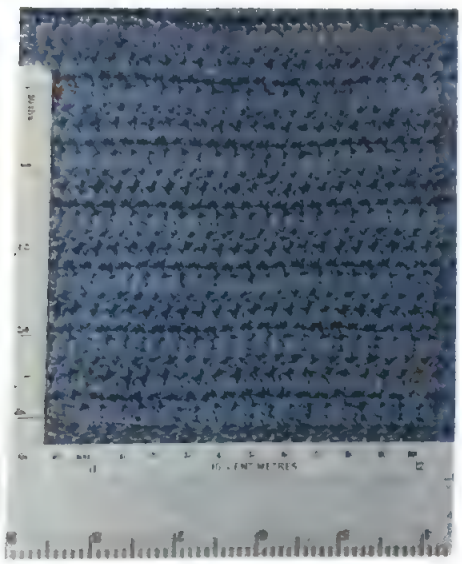
It is absolutely vital to work to the tension stated in a printed pattern, because this is the number of stitches and rows obtained by the designer and all the calculations for accurate measurements have been based on these.

Correct tension is not so essential when making something as simple as a scarf or bag like the ones seen in this chapter, where an overall difference in width and length will not affect the results.

How to check your tension

Before beginning any pattern where you are working to specific measurements, always check that the correct tension is being obtained by working a 10cm (4″) square, using the hook size and yarn recommended.

Use a ruler (either plastic or metal) to measure out and mark with pins two 10cm (4″) lengths, one across the stitches and the other down the rows (fig.1).



1. *Trebles worked to give 18 stitches and 10½ rows to 10cm (4″).*

If your tension is too loose you will have too few stitches and rows and you should change to one size smaller hook to make a tighter fabric.

Too many stitches and rows means that your tension is too tight and you should change to one size larger hook to make the fabric looser.

You should remember two important points if you are working to a pattern where the measurements must be exact. Firstly, although it is usual to change to one hook size smaller or larger, it does not matter how many times you have to change the size as long as you obtain the correct tension.

Secondly, it is essential to obtain the stitch, or width, tension but not so vital to achieve the row, or length, tension which can be easily adjusted by working more or less rows.

Using tension in designing

The three designs shown in this chapter perfectly illustrate the important part that tension plays in designing, apart from the usual role in measurement calculations.

For each design the same stitch—Solomon's knot stitch—has been used but the hook size and yarn are different, producing a gossamer-light shawl, a soft, bulky muffler or a sturdy string shopping bag.

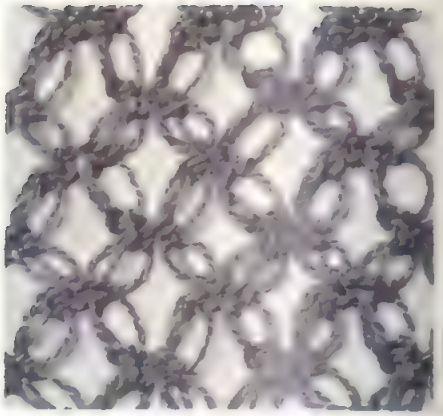
A totally different effect can be achieved by making the muffler in a fine yarn or the shawl in mohair. All you have to do is calculate the tension with each yarn and adjust the number of rows and stitches required to give the correct measurements.

The fascination of crochet lies in its adaptability as a craft—you are working both a fabric and a shape at the same time.

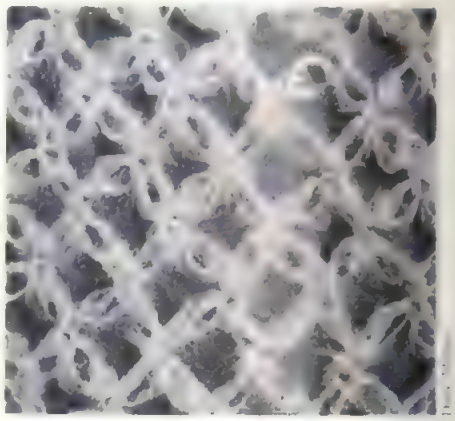
Solomon's knot stitch

This very ancient stitch has many uses and is simple to work. It does not begin with a row of foundation chains but requires a slip loop on the hook, then work 1 chain.

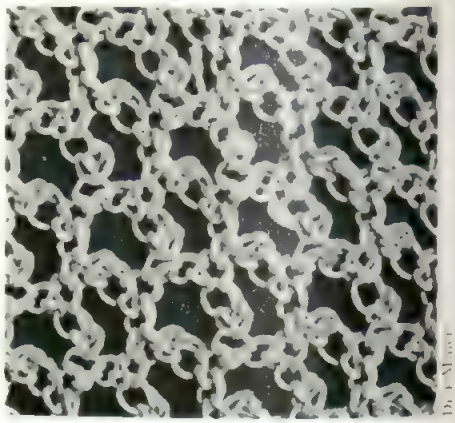
1st row. *Draw the loop on the hook up to a height of 1.25cm (½″), noting that this affects the openness of the pattern and can be varied to suit the hook size and yarn being used. Take yarn round the hook (yrh) and draw a



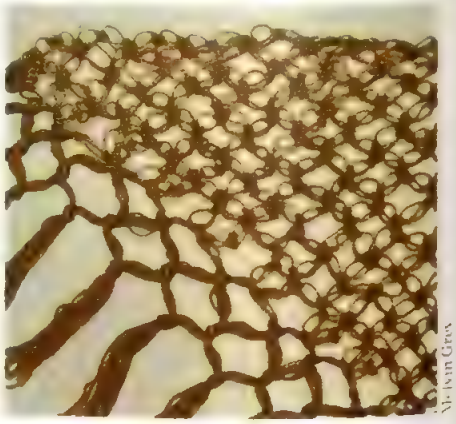
Solomon's knot worked in 3-ply.



Solomon's knot worked in mohair.

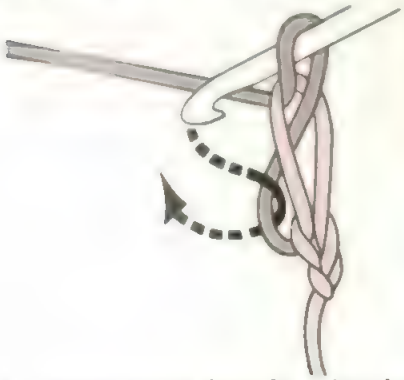


Solomon's knot worked in fine string.



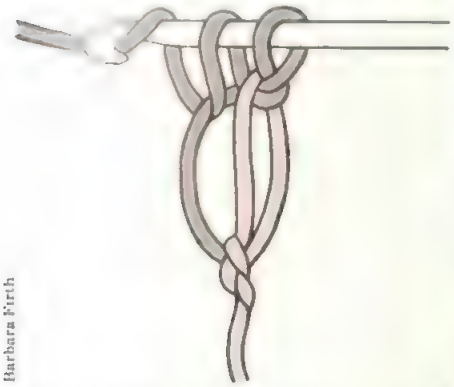
The shaped edge of the shawl.

loop [illegible], insert hook from front to back under the back thread of the loop just made (fig.2), yrh and draw a loop



2. *Inserting hook from front into back thread of loop just made.*

through, (2 loops on hook), yrh and draw through 2 loops on hook (fig.3)—



3. *Drawing yarn through loops on hook to complete Solomon's knot.*

one Solomon's knot has been made—, repeat from * for the required length, noting that an even number of knots must always be made.

2nd row. Miss the knot on the hook and the next 3 knots, insert the hook into the centre of the next knot and work 1 double crochet stitch (dc), *make 2 knots, miss 1 knot along the 1st row, 1dc into centre of next knot on 1st row, repeat from * to end, working last dc into the first ch loop at beg of 1st row.

3rd row. Make 3 knots, 1dc into centre of next unjoined knot of the last row, *make 2 knots, 1dc into centre of next unjoined knot of the last row, repeat from * to end.

The 3rd row forms the pattern and is repeated throughout.

Mohair muffler

For a muffler about 30cm (12″) wide by 244cm (96″) long.

You will need:

150gm (5¼oz) or random coloured mohair yarn in a double knitting quality.

One No.4.50 ISR (US I) crochet hook.

Barbara Firth

Roger Chanty

Solomon's knot stitch in mohair makes a soft, bulky muffler.

To make the muffler

☐ Using the crochet hook make 20 knots, drawing each loop up to a height of 2.5cm (1″).

☐ Continue working in pattern until the work measures 244cm (96″) from the beginning. Fasten off.

Roger Charity

1280

String shopping bag

For a bag about 35cm (14″) wide by 40cm (16″) deep.

You will need:

2 balls of fine parcel string.

One No.4.50 ISR (US G) crochet hook.

To make the bag

[1] Using the crochet hook make 40 Solomon's knots, drawing each loop up to a height of 1.25cm (½″).

[2] Continue in pattern until the work measures 81cm (32″) from the beginning. Fasten off.

[3] Make up the bag by folding it in half lengthwise and join the side seams, by oversewing them, from the lower edge to within 15cm (6″) of the top edge.

Cut 12 lengths of string, each 91cm (36″) long for the handle.

Divide the string into 3 groups with 4 lengths in each and plait them together, knotting each end.

[4] Thread each plait through the last row at the top of the bag from the outer edge to the centre and tie the ends together to form a handle.

[5] Complete the other handle in the same way.

Fringed shawl

For a shawl measuring about 168cm (66″) across the top edge, excluding the fringe.

You will need:

100gm (3½oz) of 3-ply botany wool plus 25gm (1oz) extra for fringe.

One No.3.00 ISR (US F) crochet hook.

To make the shawl

[1] Using the crochet hook make 140 knots, drawing each loop to a height of 1.25cm (½″), then shape the sides by working as follows:

☐ **Next row.** Miss knot on hook and next 4 knots, insert hook into centre of next knot and work 1dc, *make 2 knots, miss 1 knot along 1st row, 1dc into centre of next knot on 1st row, rep from * to end, working last dc into first ch.

☐ **Next row.** Make 3 knots, miss first knot, next unjoined knot and joined knot of last row, 1dc into centre of next unjoined knot of last row, *make 2 knots, miss next joined knot of last row, 1dc into centre of next unjoined knot of last row, rep from * to end.

☐ Repeat the last row until 2 knots remain. Fasten off.

☐ Cut lengths of yarn, each 40cm (16″) long.

☐ Take 6 strands together at a time and knot into each space along side edges only.

☐ Work 2 lines of lattice fringing (Crochet chapter 5, page 482), each line 2.5cm (1″) below previous knots.

☐ Trim the fringe.

Solomon's knots worked in fine parcel string form a strong, flexible fabric ideal for a shopping bag.

Roger Charity

Solomon's knot stitch worked in 3-ply botany wool makes a gossamer shawl.

Spatter painting techniques

Spatter painting means just what the name suggests—splashing or spattering paint. By simply laying a shape such as a leaf or cut-out design on a sheet of paper and flicking colour on it from a stiff brush, paint or ink builds up around the marked off area and the shape remains as a kind of silhouette when the design is removed (fig.1). The surrounding area has the textured, speckled effect that spattering gives.

While a stiff brush is the traditional tool for spatter painting the development of the aerosol has considerably enlarged the type of designs and surfaces possible. This chapter is devoted to the traditional methods, however, and the possibilities of aerosols are developed later on.

Designs

Whatever the surface you are decorating make sure your subject or design is suited to spatter techniques which are, in effect, silhouette techniques. Detailed or complicated motifs will end up as a confused mess. Keep your design simple and do not use too many colours.

Leaves and ferns are very popular design images for spatter painting but they must be pressed first so that they will lie flat on the surface being spattered.

Children find spattering simple cut-outs an easy and enjoyable pastime while adults can use the technique to make more intricate decorations on lampshades, clothing and household linen.

Materials

These are very simple and easy to get.

Colour. The type of colour you choose depends on the surface you are spattering. On paper, watercolours are perfectly suitable and, since they are washable, are recommended for children. Ink can also be used but, again, a washable type is recommended since there is always the danger of spots getting flicked on clothing or nearby furniture.

Cold water fabric dyes such as Dylon work well on fabrics and are colour fast. Prepare the dye according to the manufacturer's instructions and then use it as you would use paint.

Surfaces. Cartridge paper and any other slightly absorbent paper is suitable for spattering. A slick surface may cause the colour to run and so impair the finely dotted effect distinctive to the technique. Fabrics should be natural fibres such as cotton or linen or you can use viscose rayon.

Brushes. Use an old toothbrush or a nail brush. It is important that the bristles are reasonably stiff so that they have enough spring to throw the paint when they are flicked.

An old dinner knife can be used to flick the paint covered bristles or you can use your finger.

Scissors are usually needed also to cut out the design image.

How to spatter

☐ Protect the area you are working in by putting down newspapers and wearing old clothes.

☐ Put some colour in a saucer and load your brush with colour by dipping it into the saucer.

☐ Hold the brush over the printing surface with bristle side *up* and either draw the blade of a dinner knife briskly toward you across the bristles of the brush or use your finger in the same manner. (Although the latter is rather messy and not recommended for dyes, it is advisable for small children.) The action of the blade or finger being pulled across the brush causes the paint to spatter as the bristles are released and jump back into place.

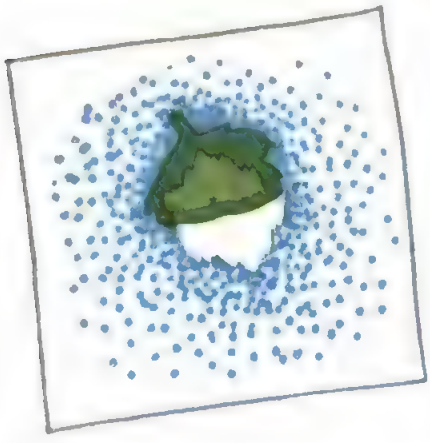
With practice it is quite easy to control direction and density of the colour. Blobs are to be avoided but do not expect all the spots of paint to be the same size. The different sizes add visual interest to the surface.

Using a diffuser

A less messy way to spatter paint is with a diffuser. This is a simple device made of two tubes. You blow through one and the other syphons the ink and spatters the surface. Colour is easier to control and the gadget is not expensive and can be purchased at most art supply shops.

A diffuser is especially recommended for spatter painting on fabrics with dyes since the fine, even spray produced gives a more professional finish.

Right: this collection of spatter painted pictures shows the scope of traditional spatter techniques.



Victoria Drew

1. *Spatter painting is basically a silhouette technique. When the image is lifted off, its outline remains.*

Using a diffuser is quite a clean way to spatter paint as the fine even spray is easy to control.

Jerry Tubby

Paper doll cut-outs on a wastepaper bin, a spatter design which would be ideal for a child's room.

Dick Miller

Upsett square work with lid

Basketry 10

When you have mastered the technique of flat square work (Basketry chapter 8, page 1222) you can progress and build up square baskets. Square baskets are suitable for sewing boxes, picnic hampers and wine baskets, etc. The instructions in this chapter make it possible for you to combine techniques and designs so that you can adapt the baskets to your own needs. The techniques include upsetting, fastenings, hinges, small handles and rib randing. The techniques used for making the lid and hinges are suitable for other shapes such as oval and round work, and the small handles can be put on to any basket where you do not require a large handle.

Bottle tote

Start with this basket as it is easier than the basket with the lid. The basket measures 20cm x 30cm (8"x 11¾"), and is 20cm (8") high excluding the handle. The basket is big and strong

Robert Harris

enough to hold six bottles.

You will need:

57gm (2oz) No.5 (2.5mm) cane
170gm (6oz) No.6 (2.6mm) cane
113gm (4oz) No.10 (3.35mm) cane
No.15 (4.5mm) cane, 1.83m (6′) long.
No.8 (3mm) cane, 2.44m (8′) long.
10mm handle cane, 91.5cm (3′) long — use MA[illegible] cane if you can obtain it.
8mm handle cane, 2.14m (7′) long.
2 handle [illegible]
Screws [illegible] and tools as for previous chapter.

For the base cut the 8mm handle cane into 7 [illegible] each 30.5cm (12″) long. Split [illegible] of these right down the centre [illegible] the length. They will split easily if you make a small cut with a trimming knife, and then pull them apart with your fingers. Five of the split handle canes will form the inner sticks of the base—the sixth piece is discarded.

☐ Set the sticks up in the screwblock with double whole canes on the outsides. The distance between the outer sticks must be 18cm (7″) centre to centre. Trim the outer sticks to fit into the block with inner sticks. Set the split canes up so that they are evenly spaced between the outer sticks. Let the curved side of the split canes face you.

☐ Weaving with No.5 (2.5mm) cane put on one row of pairing, then rand and finish off with one row of mock pairing so that the base is 27cm (10½″) high. Remember to twist the weaver around the outer stick on every second or third round to avoid grins (gaps) showing. Keep the sticks upright and do not let the work get wider or narrower towards the top.

☐ Remove the base from the screwblock and trim the ends of the weavers and the four ends of the outer sticks — *do not trim the inner sticks for the time being.*

For the stake up cut 21 stakes 46cm (18″) long and 14 stakes 51cm (20″) long, all from No.10 (3.35mm) cane. Point the 21 shorter ones at one end with a short point and the others with the usual longer point.

☐ Place the base flat on the table with the trimmed ends upwards. This will become the inside of the basket.

☐ Use the bodkin to form a channel and insert one of the longer stakes into the base between the outer sticks of one corner. It does not matter if the stake lies underneath the two sticks in the crevice that is formed by the roundness of the canes. Repeat with another stake at the other end along the length.

☐ Stake up along the length. Eleven of the shorter stakes must be inserted into one side along the length of the work. Use a pencil and make marks 6mm (¼″) in from the corners. Make nine more marks, evenly spaced between the two outside marks.

☐ Use the bodkin to make holes through both the outer sticks in which to insert the stakes. Start at one end and insert each stake as you go along. Push the bodkin into the outer sticks from the outside and in between the weaving canes where the marks are. Make the holes quite large. Most difficulties encountered in staking up square work are caused by holes which are not large enough. Pull the bodkin out and insert the stake immediately. The hole closes up quickly when the bodkin is removed, so if you were not quick enough open the hole again with the bodkin and try again.

Insert the stake until you can see the point on the inside of the outer sticks. Make sure that all the pointed section is inside the sticks—if it is not the stake will crack and split on the upsett.

Now repeat on the opposite side. Insert 2 long stakes between the outer sticks (as before). Instead of eleven stakes along the length, 10 stakes are inserted to create an odd number which makes randing easier.

Cut off any surplus ends from the inner sticks and insert one of the long stakes beside each stick at each end. It doesn't matter which side of the stick they are inserted but try to space them evenly.

For the upsett make sure that the stakes are well soaked and nip each one close to the base. Bend them all up together and tie tightly. If you have not trimmed all the outer base sticks, do so now.

☐ Insert 4 weavers of No.6 (2.6mm) cane into the base and 4-rod wale for one round. Continue with a 3-rod wale for 4 rounds. Keep the corner stakes close together and do not try to space them evenly—the closer together they are, the squarer the corners will be. Keep the waling upright.

☐ Cut 8 bye-stakes 20.5cm (8″) long, of No.15 (4.5mm) cane. Point one end of each and insert them into the waling—insert 2 bye-stakes at each corner, next to a stake on the side closest to the corner.

The thicker bye-stakes are used to make the corners stronger and also help to keep the corners square.

Two examples of square baskets: the picnic basket with a lid, and the bottle tote with partitions to separate bottles. Designer: Barbara Maynard.

Well-soaked canes are twisted to form the partitions for the bottles.

☐ Cut 27 bye-stakes 20.5cm (8″) long, of No.10 (3.35mm) cane and insert them into the waling beside and to the right of the remaining stakes.

☐ Rand with No.6 (2.6mm) cane keeping the work straight up and the corners as square as possible. Continue until the randing measures 7cm (2¾″).

Put on 3 rounds of waling using No.6 (2.6mm) cane.

Insert the handle liners in the centre of the two short sides.

Rib randing is a decorative variation of randing. It is done by passing the cane in front of two stakes and behind one (instead of in front of one and behind one). This makes a thicker weave with a slight spiral effect. You have to have a number of stakes that will not divide by 3 or the weaver will go in front of the same stakes each time.

☐ Rib rand for 5cm (2″) with No.6 (2.6mm) cane.

☐ Wale with No.6 (2.6mm) cane for 3 rounds.

For the partitions cut a piece of well soaked No.8 (3mm) cane twice the width of the basket plus 30.5cm (12″). Bend it in the middle and loop it over a stake one third of the way down along the length. Twist the two ends together, quite tightly, until the twisted length is sufficient to reach across to the other side. Loop the two ends around a corresponding stake on the other side, one end going round one way and the other, the other way round. Weave the ends away on top of the waling.

☐ Repeat with a second piece of cane two thirds of the way along the length so that there are three equal partitions.

☐ Cut a piece of No.8 (3mm) cane, twice the length of the basket, plus 30.5cm (12″). Bend it in the middle and loop it over one of the handle liners and its adjoining stake. Twist the ends together until it reaches the first of the cross partitions. Pass one cane around each side of the cross twist and continue to twist until you reach the next cross partition and pass the cane around it as before. Twist again until you reach the other end and finish as before.

☐ Trim the surplus ends of the bye-stakes, re-soak the stakes if necessary and nip them 6mm (¼″) above the waling.

☐ Put on a 4-rod border. Try to keep the corners very square. Trim all the surplus ends.

☐ Point each end of the 10mm handle cane and shape the handle into a flat U-shape. Remove the liners and insert the handle well down into the work.

☐ Cut 12 pieces of No.6 (2.6mm) cane, 1.2m (40″) long. Insert six to the left of each end of the handle. Rope the handle and finish with a herringbone pattern (Basketry chapter 5, page 727).

Dick Miller

Detail of D-shaped handle, and the hasp and loop for securing lid.

Picnic hamper with lid

The outside measurements of the hamper are 38cm x 25.5cm (15″x 10″), height 14cm (5½″). The lid is secured with hinges and fasteners.

You will need:

170gm (6oz) No.5 (2.5mm) cane.
170gm (6oz) No.6 (2.6mm) cane.
170gm (6oz) No.10 (3.35mm) cane.
113gm (4oz) No.15 (4.5mm) cane.
No.8 (3mm) cane, 2.74m (3yd) long.
No.4 (2mm) chair seating cane, 7.32m (8yd) long.
8mm handle cane, 4.57m (5yd) long.
4 small nails or panel pins.
All-purpose adhesive.
Screwblock and tools as for previous chapters.

Small D-shaped handle—make this first so that it is ready when the time comes to fix it on.

☐ Cut a piece of 8mm handle cane 35.5cm (14″) long. Soak it well and bend it into a U-shape. Nip it hard with the round-nose pliers 10cm (4″) in from each end. These 10cm (4″) sections form the straight side of the handle and each piece must be shaved away with a diagonal cut so that they form one thickness when put together (fig.1). If the ends will not come round far enough cut out a wedge shape where you nipped the cane (fig.2).

1. *Diagonals cut to fit each other.*

2. *Wedges cut in cane before bending.*

☐ Tie the handle together in its correct shape and leave to dry. Glue the ends together and again tie in position and leave to dry.

☐ Wrap the handle with chair seating cane. Start at the back of the handle which is the straight side, start and finish as for the handle of the wine cradle (Basketry chapter 7, page 1106). The corners are difficult to keep tidy—wrap tightly and just do your best. You may use a leader on the curved side and, if you join it in before the corners, it will help to cover the corners.

For the base cut four outer sticks of 8mm handle cane and 16 inner sticks (these are not split) of No.15 (4.5mm) cane—all 40.5cm (16″) long. Set them up in the screwblock with the handle cane on the outside and 23cm (9″) apart. Space the other sticks evenly.

☐ Make the base as before—one row of pairing to start, then rand and finish with one row of mock pairing when the work measures 31cm (13½″)—all with No.5 (2.5mm) cane.

☐ Using No.10 (3.35mm) cane, cut 27 stakes 35.5cm (14″) long, and 20 stakes 40.5cm (16″) long.

Stake up as before with the shorter stakes along the length and the long stakes into the ends.

☐ Nip the stakes and tie them up into two bunches—one at each end. This will prevent the base from becoming distorted and curling up.

Upsett with one row of 4-rod waling and three rows of 3-rod waling with No.6 (2.6mm) cane.

☐ Cut 39 bye-stakes of No.10 (3.35mm) and eight of No.15 (4.5mm) cane for the corners—all 12.5cm (5″) long. Insert them as before.

☐ Rand for 5cm (2″) with No.6 (2.6mm) cane.

To fix the handle mark its position in the centre of the long side you prefer. Select two stakes, one at each end of the flat side of the handle, which are convenient to carry the loops that will secure the handle.

☐ Cut 2 pieces of No.8 (3mm) cane, 35.5cm (14″) long. Make sure that they are well soaked and not brittle. Bend one in the middle and loop it round one

of the selected stakes about 1.8cm (¾″) down from the top of the randing. Twist this cane for 1.8cm (¾″) by taking one end in each hand and crossing your hands over. Transfer the canes into the other hands and repeat for the required length. This method produces a tight even twist.

☐ Place the handle in position so that the twist comes through the inside of the handle. Take the two ends of the twist upwards and loop them round the back of the same stake over the top of the randing. Weave the two ends away. Do not make the twist too loose nor too tight. If it is loose the handle will have too much play and if it is tight it will chafe the loops

☐ Repeat with another loop at the other end of the handle.

☐ Rand with No.6 (2.6mm) cane right round the basket. Continue until the randing measures 7.5cm (3″).

☐ Wale with No.6 (2.6mm) cane for four rounds.

☐ Put on a 3-rod border and a follow-on trac border

The lid. If you have made your basket absolutely perfect the lid will be exactly the same shape as the base and slightly larger to allow for the upsett. However, as the shape is never constant, the lid must be made to fit the shape at the top of the basket.

A template is made by turning the basket upside down and placing it on a sheet of card. Draw all the way round the basket. This is to be the shape of the lid. Cut the template out to enable you to follow it closely (fig.3).

3. *Template for lid with hinge marks.*

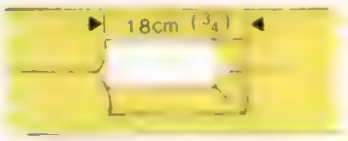
☐ Mark the position of the hinges on the template along the length on the side opposite the handle.

☐ Cut 6mm (¼″) from the short sides of the template to allow for the borders.

☐ Cut four sticks of 8mm handle cane and 16 of No.15 (4.5mm) cane—all the length of the template plus 5cm (2″). The extra 5cm (2″) is to allow for 2.5cm (1″) which goes into the screwblock and 2.5cm (1″) at the top end to make finishing easier.

☐ Mark the outer stick along the side where the hinges are to be. Don't forget to allow for the extra length of the sticks.

☐ At the hinge marks cut halfway through the thickness of the cane so that the cuts are 1.8cm (¾″) long (fig.4).

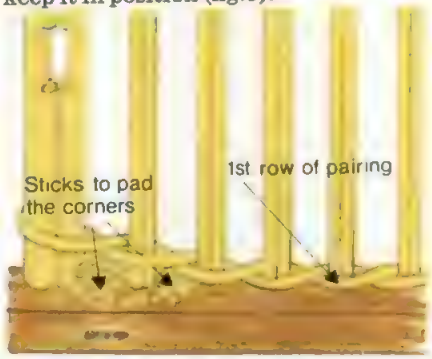


4. *Recesses cut to allow for hinges.*

☐ Set the sticks in the screwblock to fit the template with the hinge cuts positioned as illustrated. Allow for the thickness of the weaving cane on each side.

☐ A stick with the hinge recesses must be on the inside with the recesses of both sticks matching (fig.5). Check that the sticks match up with the template.

☐ Using No.5 (2.5mm) cane put on a row of pairing then, if the corners of the template are rounded, lift the pairing up to match the template. Place pieces of cane below the pairing to keep it in position (fig.5).



5. *Sticks inserted to position pairing.*

☐ Using No.6 (2.6mm) cane continue randing but fill up the hollow between the corners by weaving backwards and forwards (Basketry chapter 6, page 917) until the weaving is straight all the way across. Continue randing and do not forget to pass the weaver twice around the outer stick on every second or third round, until you reach the first hinge mark.

☐ Continue to rand backwards and forwards but pass the cane round the inner of the two outside sticks so that the weaver settles into the cut-away part. When the end of the hinge mark is reached revert back to passing right round the outer sticks.

☐ Follow the template to the other hinge and repeat the method of making the hinge space. Continue to the end of the lid. Pack again (weaving backwards and forwards going to one stake less each time) if necessary to make the rounded shape of the template.

☐ Finish with one row right across and put on one row of mock pairing.

☐ Complete the lid with a 3-rod border at each end and whip the borders with chair seating cane. Secure the border with small nails or panel pins.

The hinges on baskets are very simple.

☐ Take a length of No.5 (2.5mm) cane (or chair seating cane) and insert it into the basket just under the border. Leave 23cm (9″) free on the inside (which will be woven away). Take the long end up and over the outer stick of the lid, through the hinge recess, down inside the lid and basket and back to the outside of the basket under the border so that it lies side by side with the other end. Continue doing this, over and over, until the hinge recess is filled up.

☐ Weave both ends away in the waling of the basket.

☐ Repeat with the other hinge.

Fastenings—make two loops in the front of the basket, using No.8 (3mm) cane, in exactly the same way as for the loops that hold the handle. Select two suitable stakes, about 7.5cm (3″) in from each end. Start the loops about 18mm (¾″) down from the waling and finish them just underneath the waling.

The hasps are similar or they may be plaited instead. These are started and finished in the lid and drop down over the front and round the loops.

☐ Loop a piece of No.8 (3mm) cane round the first inner sticks from the front edge of the lid, and slightly to the left side of the loop in the basket.

☐ Add a third cane for a plait. Twist (or plait) until there is sufficient length to go right round the loop on the opposite side from which you started and back up to meet the twist (or plait) again (fig.6). Here it crosses over

6. *Cane twisted to form the hasp.*

Barbara Maynard

itself—take one end of the canes through the twist (or plait)—and continue until you reach the first inner stick again, this time slightly to the right. Weave the ends away and repeat on the other side.

☐ Fasten the basket with a stick made from handle cane. Cut a piece long enough to pass through both loops with 5cm (2″) to overlap at both ends. Point one end.

The other end may be left plain or make a loop of No.15 (4.5mm) cane, shaped and glued in place, and then wrapped over with chair seating cane.

Completing hinged cube

Design know-how 46

Melvin Grey

How the finished cubes should look.

This chapter completes the instructions for making hinged cubes.

☐ Crease each shape along the pencil lines and stick each flap to its appropriately marked edge, eg flap 1 to edge 1. The finished unit will look like a flat pyramid stuck on to a steeper pyramid (fig.4).

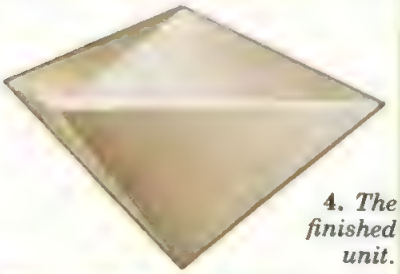
☐ Place four units together, the smaller sides of each facing inwards to make a cube. Repeat for the other four units.

☐ Cut two strips of paper 15cm x 5cm (6″ x 2″) and spread adhesive on one side of both strips.

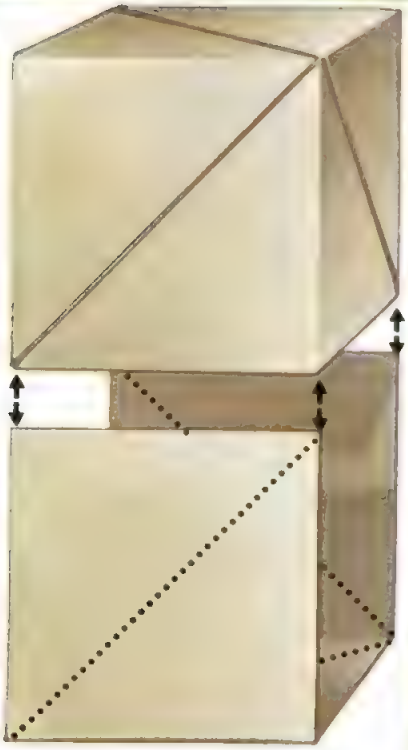
☐ With one cube positioned as in fig.5 wrap a strip of paper around three sides as shown.

☐ With the other cube positioned as in fig.6 wrap the other strip of paper round it as shown.

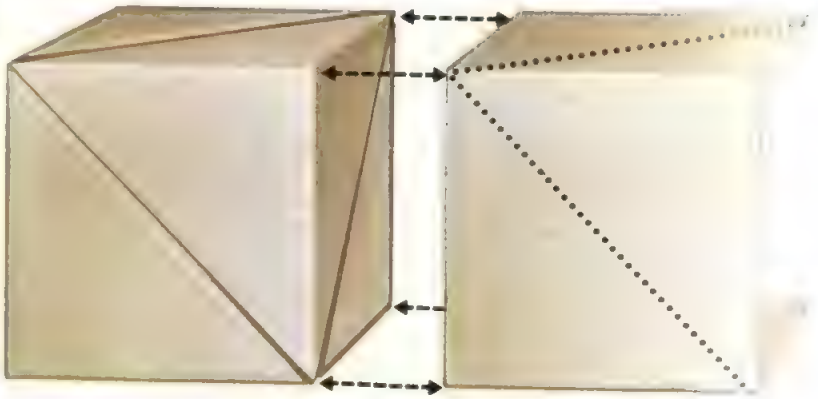
☐ Keeping both cubes together as in fig.7 cut another strip of paper 10cm x 5cm (4″ x 2″). Fit across the top face and cut the strip at the diagonal PQ. Once cut, stick the strip into position. All the joins can be reinforced with thin Sellotape on their inner surfaces.



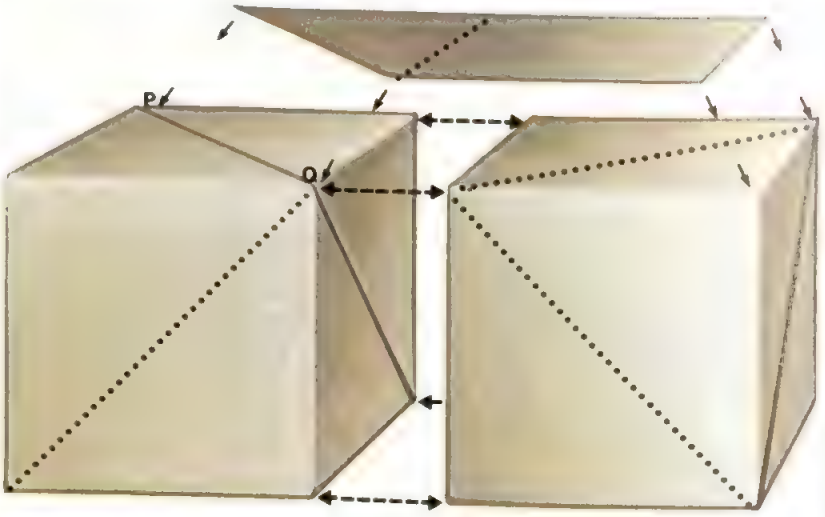
4. *The finished unit.*



5. *Folded paper (bottom) fits round cube (top).*



6. *Folded paper (right) fits round cube (left).*



Trevor Lawrence

7. *Place cubes side by side and join with strip of paper.*

Creative ideas 46

Treasure boxes

Presents of chocolates and Easter time goodies are often packaged in well-made, attractively shaped cardboard boxes and it is a pity not to make further use of such containers.

Here are the instructions for turning a humble box into a glittering coffer for treasured possessions.

You will need for an egg about 18cm (7″) deep:

Cardboard egg.

46cm (18″) of scrim (upholstery lining).

46cm (18″) of 2.5cm (1″) and 1m (1yd) 1.25cm (½″) wide velvet ribbon.

46cm (18″) of 1.25cm (½″) wide seam binding.

Sequins, beads, stranded embroidery thread, invisible nylon thread and Copydex adhesive.

Begin by planning the colour scheme for the finished design. This is important because any decoration or colour on the egg will show through the scrim, thus influencing the finished effect.

The scrim provides the base for the decoration of the egg. To fix it to the egg, first separate the halves and carefully remove the ring of cardboard fitted inside around the edge on one half. Stretch the scrim over the outer surface of one of the halves and cut to shape, allowing 1.25cm (½″) all round for a turn-under. Cut a second piece the same shape.

Smear adhesive around the edge on the inside of the egg. Wrap the oval of scrim over one half and stick down the turn-under. Repeat with other half. The egg is now ready to be decorated.

The halves are worked separately, but remember that they will be joined when finished, so take care that the materials link correctly and neatly.

The narrow ribbon is used for edging each half.

The wide ribbon goes lengthways over the crown of each half and the ends of each must meet accurately before being stitched to the scrim.

Fold under ends and cover the ends of the narrow ribbon. Put a small bow of narrow ribbon at the join. This gives a quartering framework for the embroidery, and you can work out the design on paper before applying it to the scrim.

Stitches can be varied: chain stitch, stem stitch, French knots and laced running stitch are all attractive.

Sew on beads and sequins with invisible nylon thread. Once the outside of the egg has been decorated, the inside must be finished off neatly too. This is done by gluing the seam binding over the raw edges of the scrim and then replacing the cardboard ring in one half. Its length will need reducing before it will fit comfortably.

The round box is decorated with similar materials. You will also need navy felt and an embroidery frame.

Cut a circle of felt the size of the top surface of the lid and glue it down.

Line the inside of the box with felt.

The embroidery is worked before fixing the scrim. Draw a circle on the piece of scrim the size of the box top and allow 1.25cm (½″) for turning. Do not cut out.

Stretch the scrim on the embroidery frame and work your design. You can also sew on sequins and ribbon at this stage.

When the design is complete, remove scrim from the frame and then cut it to size.

Centre it over the lid and glue the turning to the side.

Cover the side of the lid with wide ribbon hiding the edges of the scrim and glue in place.

Design: Dorothy Larkum

Roger Phillips

Choosing a potter's wheel

The potter's wheel existed in Mesopotamia as early as 4,000 BC. In Egypt it appeared rather later, but its use is recorded in paintings of the Third Dynasty, which flourished about 2,000 BC. These early wheels were simply large discs made of wood, stone or baked clay, mounted on a fulcrum. The potter had to spin the disc with his free hand or bare foot.

Although more sophisticated wheels are available today, the hand wheel is still used in China and Japan. The disc is notched around the edges and mounted on a spindle. The potter thrusts a short stick into one of the notches and sets the wheel spinning, constantly repeating the action as the momentum dies away.

The first major development was the invention of the kick wheel. Here, the wheelhead on which the pots were formed was attached to a long spindle which connected it with the foot-operated flywheel below. This meant that the potter could work in a comfortable position with both hands free. Later improvements have resulted in wheels with variable speeds, side treadle wheels so that the potter can work sitting down, and power wheels, but the basic principles remain very simple.

Types of wheel available

Nowadays there are two distinct types of potter's wheel available—the kick wheel operated by the potter's foot and the electrically driven power wheel.

The kind of wheel you should choose depends on the type of work you want to do, the space you have available, and the amount of money you have to spend. Generally speaking, if you wish to throw large and heavy pots you need a robust and powerful wheel, probably a power wheel, whereas a light-weight kick wheel is quite adequate for turning small pots.

Kick wheels are naturally cheaper than power wheels. At the lower end of the price scale you can buy a do-it-yourself kick wheel kit, whereas a power wheel will cost considerably more.

Electrically powered wheels are fairly easy to use. You can concentrate entirely on the work your hands are doing and, once you have learnt to throw, you can make a lot of pots quickly and easily. Kick wheels are more difficult to use because it is essential to co-ordinate the activity of the feet and hands. However, there are potters who believe that once you have mastered the art of the kick wheel you will make a better pot.

Ideally, you should seek the opportunity to try out different wheels in schools, or make a visit to a supplier's showroom where you can compare the different types of wheel available. In this way you will discover which wheel best suits your needs.

General points

Before buying a wheel you should consider the space you have available. Some wheels are quite large and it is important to check not only that it is suitable for your working area but also that it is not too bulky to pass through your door. It is also necessary to check the weight of clay the wheelhead will bear. If you plan ultimately to make large pots you need a wheelhead that will take heavy amounts of cla

You should also check the speed ratio. Some wheels only operate at high speeds which restrict the kind of pots that can be made on them. The faster the wheelhead turns, the faster the potter has to work. The speed of a wheel is directly related to the skill and confidence of the potter using it.

Kick wheels

There are two main types of kick wheel available—the momentum wheel, sometimes called the continental wheel, and the crank wheel.

The momentum wheel is turned by the potter's feet on a heavy flywheel. Throwing is done on the dying momentum.

The crank wheel is powered by the foot pushing a treadle bar in a forward-side movement. The most commonly used crank wheel in the United Kingdom is the Leach wheel, which is also available for export.

The geared kick wheel is a variation of the crank wheel. It has the advantage of being less jerky than the crank wheel, has a more positive drive, slow wheelhead speed and even rhythm.

A good kick wheel should have a very solid, stable framework and a heavy flywheel. The seat or kick bar should be adjustable to suit individual requirements. Muscles can be strained by sitting and working in a bad position, and it is important to be able to kick easily without jerking the whole body.

Once the technique of throwing has been mastered, the use of a wheel allows the potter to create a wide variety of shapes relatively quickly.

Nelson Hargreaves

A crank or direct kick wheel, worked from a standing position with potter's foot on the treadle.

A variable speed (0-300 rpm) motor wheel. Pots in this picture, and below, designed by Gyrth Crayford.

A double cone drive wheel. Speeds are quite high, from 50-500 rpm. The seat height is adjustable.

Friction wheel drive, worked from a standing position. All wheels photographed at the Fulham Pottery.

Nelson Hargreaves

Electric wheels

There are several different types of electric wheel from which to choose.

The variable speed motor is the most modern. The advantages of this wheel are that it has good speed variations, from 0-300 rpm, and that it runs smoothly and is easy to maintain.

The double cone drive wheel is also easy to maintain and will give years of hard use. It is solid, robust and reliable but tends to be rather fast with speeds in the region of 50-500 rpm.

The friction wheel drive has a single cone and motor and is also easy to maintain.

The speed on all these wheels is regulated by a foot pedal, the amount of pressure determining the speed at which the wheel spins. Greasing and oiling are usually all that is necessary in the way of maintenance.

A geared electric wheel is also available. In this case the speed is determined by a bar which has to be slotted into graded notches at the side of the wheel. This type is often used in schools but it does not run very smoothly because it has to be stopped each time you want to change the speed. It also needs more maintenance than other wheels.

Before buying any electric wheel, check that the splash tray and starter buttons are waterproof to protect both it and you from the electric current.

Making paper lampshades

Making card lampshades is an agreeable craft and it is not very difficult to achieve professional-looking results. Moreover, the advantages of making your own lampshades are considerable. Home-made shades show an enormous cost saving over shop-bought lampshades and allow you maximum freedom of choice as regards colour, pattern, size and shape. Ready-made shades available in the shops are restricted, inevitably, to a limited number of variations. (How often have you found a lampshade in just the colour you were after but too large or too small to suit your purposes?) Selecting your own paper, light fitting and rings enables you to tailor a lampshade precisely to meet your requirements.

Rings and frames

Essentially, a paper lampshade is made by gluing paper on to two rings, one of which incorporates a light bulb fitting. These rings can be bought singly or already incorporated into a lampshade frame and are to be found in handicraft shops and the haberdashery section of some department stores.

Lampshade frames, which consist of two rings joined at intervals by struts, are available in a series of predetermined shapes and sizes. These frames are much favoured by some people but the extra support given by side struts is, in fact, designed for and only necessary when making silk and other flimsy fabric lampshades.

Lampshade rings are cheaper than frames. They provide all the support required for paper shades, they are easier to fit, and are additionally advantageous in that they allow total flexibility in deciding exactly how tall and how flared your lampshade will be.

Types of lampshade

Whether you decide to make a large or small lampshade—irrespective of whether the shade is to be round or oval, for a table, wall bracket, standard or hanging lamp—a home-made paper lampshade should be one of the following three basic types

Drum lampshades (sometimes called cylinder lampshades) are distinguished by the fact that they have parallel sides—ie the circumference at top and bottom is the same.

Coolie lampshades are so called because of their similarity to coolie hats, very narrow at the top and very wide at the bottom.

Empire lampshades are a less exaggerated version of the coolie shade, the circumference of the top being slightly smaller than the bottom to give a gently flared effect.

Making a pattern

A drum lampshade is quite straightforward but even so it is advisable to make a pattern first, using rough paper, rather than run the risk of cutting your chosen lampshade paper inaccurately. The pattern can, of course, be used as a template for cutting the chosen paper. Measure the circumference of your rings adding 1.2cm (½") for overlap, and decide on the finished height of the shade. Draw up a rectangle accordingly using a set square for accurate right angles (fig.1). Cut out, join the overlap at top and bottom with paper clips or clothes pegs and slip over the rings to test for size.

Empire or coolie lampshade. The pattern for a flared or tapered shade is slightly more complicated, and should be done on squared graph paper.

You will need:

A large sheet of squared graph paper.
Clothes pegs or paper clips.
A pair of compasses, a piece of string, a drawing pin and sharp scissors.
Tape measure, ruler and pencil.

☐ As shown in fig.2, near the bottom left-hand corner of the paper, draw a horizontal line (A-B) equal in length to the diameter of the bottom ring.

☐ From the centre of this line (C) draw a perpendicular line upwards equal to the required height of the finished shade (D).

☐ Using D as centre, draw another horizontal line (E-F) equal in length to the diameter of the top ring.

☐ Join A-E and B-F and extend these

Melvin Grey

Decorative frieze cut from gift paper was used for this small drum shade.

lines upwards until they intersect (G).

Using G-E as the radius, draw an arc from E equal to the circumference of the top ring. Use a compass or a piece of string tied to a pencil at one end and anchored at point G with a drawing pin (thumb tack).

Using G-A as the radius, draw an arc from A, equal to the circumference of the bottom ring.

Add 1.2cm (½") to the length of each arc, then join them (H-I).

Cut out round A-E-H-I for your lampshade pattern, join the overlap at top and bottom with paper clips or clothes pegs and slip over the rings to test for accuracy.

Suitable papers

Theoretically, only very stiff paper or card is suitable for paper lampshade making but, in practice, a light-weight, limp paper can prove equally satisfactory providing it is mounted on to a firm backing paper or card to give necessary rigidity to the finished shade.

Pulpboard, indexboard and coverboard are all available in 250g/m²-300g/m². This means the papers weigh between 250gm-300gm per square metre – an ideal weight and thickness for lampshade making.

Because they can be used alone without a backing paper, these materials are probably the easiest to use for lampshade making. Orbit Ivory board is a pulpboard which comes in a good range of colours; it is available in sheets measuring 640mm x 900mm (25"x 36") and 520mm x 650mm (20"x 25½").

Light-weight papers. The choice of colours and patterns in light-weight papers is, of course, far greater,

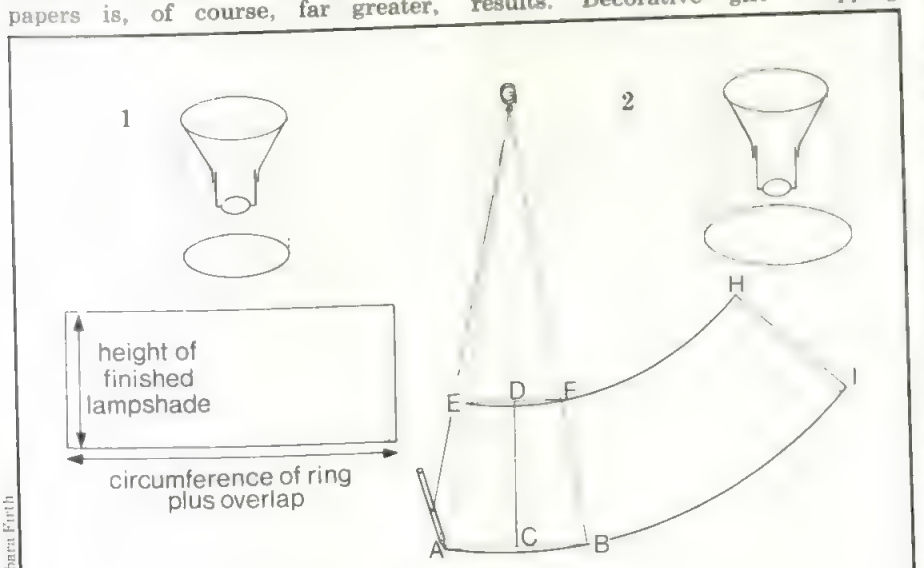
Above: elegant coolie shade and base in natural colours.

offering temptingly pretty designs and enormous scope to the lampshade maker intent on unique and personal results. Decorative gift wrapping paper, shelf lining paper and wallpapers come in literally thousands of designs, plain or patterned and sometimes with textured finishes. A lampshade that matches your walls not only looks charming but makes good use of leftovers too!

It should be noted, however, that it is inadvisable to make a very tapered shade with a large floral, striped, checked or otherwise very distinctively patterned paper. Choose a simple drum shade instead because the curved cut-out shape of a tapered shade makes pattern matching impossible and may well distort the design in an extremely unsightly way. Small designs with frequent pattern repeats present a lesser problem as do muted designs and random patterned papers (such as marbled papers)—but, even so, a drum lampshade makes for neater looking results and is easier to handle.

Silver kitchen foil looks gleaming and exotic yet is relatively cheap. Even throw-away materials, such as yesterday's newspaper or brown parcel wrapping paper, can be used for highly decorative and original lampshades.

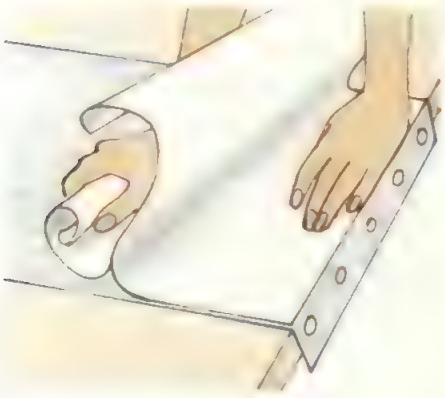
Self-adhesive card. Some papers are tricky to mount successfully on to card —because liquid adhesive, however carefully applied, is liable to be absorbed into, and leave disfiguring marks on, the paper. The problem of



1. *A drum lampshade pattern is a simple rectangle.*
2. *Patterns for tapered (empire or coolie) lampshades need to be carefully calculated on graph paper. Use string to measure circumferences. To draw an arc, anchor the string with a drawing pin and tie a pencil to the other end.*

staining can be overcome by using a self-adhesive card, such as Selapar, which can be bought from handicraft shops. Self-adhesive card can be used for backing close-weave fabrics as well as paper lampshades and is simple to use.

First prepare your decorative paper, using a cool iron to remove any fold marks if necessary. Lay the paper, reverse side facing upwards, on a firm flat board and pin taut with drawing pins. Use one hand to unroll a few inches of backing paper. With the other hand, press the adhesive surface of the card down on to the back of the decorative paper, carefully aligning the edges of both papers. Work slowly and carefully, smoothing the adhesive thoroughly to avoid any trapped air bubbles or wrinkles (fig.3). Gradually peel away the remaining backing paper and stick the card into position.



Barbara Firth

3. *Self-adhesive card is useful for mounting light-weight papers. Pin decorative paper, wrong side up, to a work table. Peel backing paper from adhesive card and press into position.*

To make a lampshade

These instructions apply to any paper lampshade—whether drum, coolie or empire shaped—made with two round rings.

You will need:

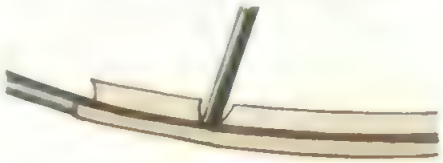
A set of rings.
Adhesive cotton tape.
Paper pattern.
Coloured card, or decorative paper mounted on self-adhesive card.
Ruler, soft pencil, scalpel or sharp knife and scissors.
General-purpose clear adhesive, such as Bostik 1 or UHU.
Blotting paper or other thick clean paper.
Clothes pegs.
Decorative braid (optional).

☐ Check that rings are clean and grease-free. Then cut a piece of adhesive tape (available from craft shops) long enough to cover the circumference of one ring and allow a 1.2cm ($\frac{1}{2}$″) overlap.

☐ Press the edge of the tape into position along the outside of the ring (fig.4).

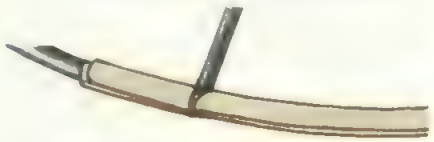
4. *Top edge of adhesive cotton tape is pressed around outside of ring.*

☐ Wrap the tape under the ring, making cuts into the tape where necessary to avoid the lamp fitting (fig.5).



5. *Curve the tape under the ring and up inside, snipping where necessary to avoid the lamp fitting.*

☐ Bring the tape over the top of the ring and stick down on itself with an overlap on outside of ring (fig.6).



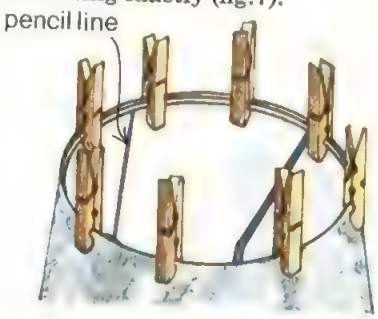
6. *Tape is finally stuck back on itself with overlap on outside of ring.*

☐ Cover the second ring with adhesive cotton tape in the same way.

☐ Lay the lampshade card, reverse side facing upwards, on the work table. Place the prepared pattern on top and trace its shape on to the card with a soft pencil.

☐ Cut out the card accordingly, making clean decisive cuts.

☐ Curl the cut-out lampshade card into shape. Hold the overlap in position temporarily by placing a clothes peg at top and bottom and slip the shade over the prepared rings. Then tightly peg all the way round the top ring, pulling the card quite taut so that it fits the ring exactly (fig.7).



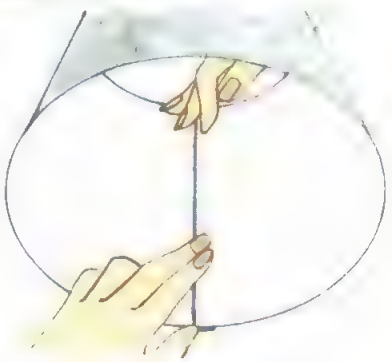
7. *Cut-out paper shade is tightly pegged round the rings. Exact overlap line is marked on the inside of the shade with a soft pencil.*

☐ Repeat this procedure round the bottom ring, then pencil mark the overlapping seam point along the inside of the lampshade as shown.

☐ Remove the pegs and lay the lampshade card, reverse side facing upwards, on a sheet of clean blotting paper or other clean thick paper. Place a second strip of protective blotting paper against the pencilled seam and gently spread a thin, even coat of adhesive along the lampshade overlap area (fig.8).

8. *Sandwich lampshade card, wrong side up, between protective wads of thick, clean paper. Spread glue over the whole of the overlap area.*

☐ Carefully remove both pieces of blotting paper to avoid the possibility of any surplus adhesive spoiling the shade. Then lift the other end of the shade and curl it over the top. Lay the edge along the pencilled seam mark and press down on to the glued area (fig.9). Place a ruler or piece of wood and a weight on top of the seam and leave for 1 hour or more until the adhesive is set firm.

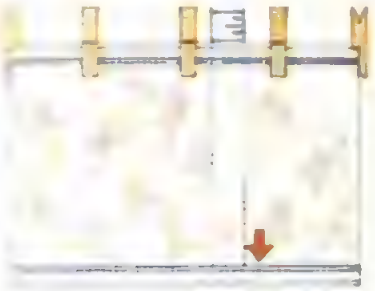


9. *Curl the lampshade card over, carefully abut unglued edge against pencil line and press down to stick seam.*

☐ If you are making a drum-shaped lampshade, insert both rings now, placing them about 1.2cm ($\frac{1}{2}$″) from the top and bottom edges of the shade and using a few pegs to hold the top ring in position.

☐ Spread a ring of adhesive about 3mm ($\frac{1}{8}$″) wide and about 3mm ($\frac{1}{8}$″) from the inside bottom edge of the shade. Then use your ruler to push the bottom ring gently down inside the shade until it

meets the glue line (fig.10). Leave for 1 hour to set firm.



10. *Inside section of drum shade. Top ring with lamp fitting is temporarily pegged in place while bottom ring is fixed. Use a ruler to push bottom ring down to glue line (shown by dots).*

Then turn the shade upside down and stick the second ring in place in the same manner.

If you are making a coolie or empire lampshade, spread a ring of glue about 3mm ($\frac{1}{8}$") wide and about 3mm ($\frac{1}{8}$") from the inside top (narrow) edge of the shade and place the shade, narrow end downwards, on the work table.

Insert the bottom (large) ring, placing it about ($\frac{1}{8}$") from the edge of the shade. Then insert and gently push the top ring with lamp fitting down the inside of the shade until it meets the glue line. The side wires of swing gimbal fittings should be positioned at right angles to the side seam of the shade (fig.11). Leave for 1 hour to set dry.

11. *X-ray view of fitting narrow ring inside tapered shade. Shade is upside down with large ring pegged in place. Keep swing gimbal side wires at right angles to seam and gently push narrow ring down on to glue line.*

☐ Remove the bottom ring. Spread a line of glue 3mm ($\frac{1}{8}$") from the bottom edge of the shade and replace the ring. Leave for 1 hour to dry.

☐ Cut a length of braid equal to the circumference of the top of the shade plus a little extra to allow for turning under the ends of the braid. Glue carefully round the outside top of the shade and press the braid into position, placing the braid join at the side seam and turning under the ends.

☐ Braid the bottom of the shade in the same way.

Colour co-ordinated wallpaper and shade by Designers' Guild.

Jerry Tubby

Crochet strips and insertions

Openwork crochet, usually worked in strips and used with fabric as an insertion, is one way of brightening up and adapting some of your favourite patterns for both decorative and functional purposes.

Triple treble insertion

The method described here is particularly suitable for making strips of crochet which are applied directly on to straight pieces of fabric, so working the crochet and joining the pieces together in one easy stage.

In this way you can add a pretty patterned panel to an otherwise plain dress or blouse and even down the side seams of a pair of trousers.

As well as being attractive to look at, this type of insertion can be functional too—say a favourite dress or skirt has become too short to be fashionable, then you could cut a section off the skirt at a convenient distance from the hem and join the two pieces together again with a crochet strip.

Dress patterns with simple seams could incorporate this method, but remember that the crochet has a certain depth and therefore the appropriate amount (ie half the width of the total insertion) should first be removed from both pattern pieces.

The triple treble insertion (fig.1) is simple to work, yet looks most effective. The actual crochet stitches used in the insertion may vary, but the preparation is always the same.

☐ Turn under 5cm (2″) seam allowance on the fabric or, for a garment, press back the seam on the fitting line.

☐ Work an even backstitch along the fitting line (fig.2) as a crochet hook cannot be inserted directly into the majority of dress fabrics.

The size of the backstitch should be large enough to allow the crochet hook to pass through it and the stitches on the two pieces of fabric should match each other in size and number.

☐ To work the first line of crochet, start with a slip loop on the hook.

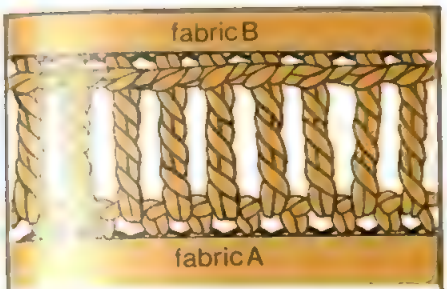
☐ With the right side of the fabric facing you and working from right to left, remove the hook from the loop of yarn and insert it from front to back into the first backstitch.

☐ Return the slip loop to the hook and draw this through the stitch on the fabric.

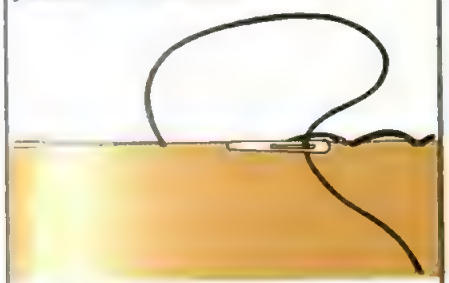
☐ Work one chain, insert the hook into the next backstitch from front to back and work one double crochet (fig.3).

This bedspread is made from random fabric patches, joined by lacy crochet strips. To keep the bedspread flat the patches should be tacked on to a fabric foundation before the crochet is placed over them. The foundation is removed when the bedspread is complete.

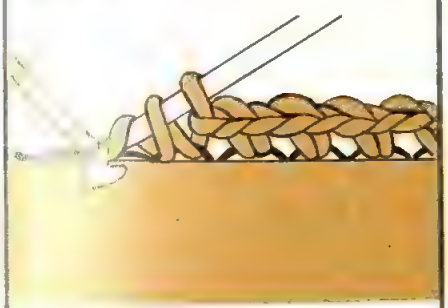
PAF International



1. *...npleted triple treble insertion jo...g two pieces of fabric.*



2. *...en backstitch worked along the f... line.*



3. *Double crochet being worked from front to back of work.*

Barbara Firth

PAF International

The openness of the crochet makes it easy to shape round the fabric patches. The same technique can be used to make a pretty bag or shawl.

☐ Repeat the last paragraph until all the backstitches have been worked into, then fasten off.

The one chain between double crochet is necessary because the sewn stitches are fairly large—if they are very small then there is no need for any chain.

☐ Work on both pieces of fabric in the same way.

☐ To work the insertion have the right side of both fabrics facing you and work from right to left.

☐ Insert the hook into the first stitch on fabric A, work 5 chain, remove the loop from the hook and insert the hook into the first chain on fabric B.

☐ Return the loop to the hook and draw this through the chain on fabric B, wind the yarn 3 times round the hook, insert the hook into the next chain on fabric A, wind the yarn round the hook and draw a loop through the stitch, (wind the yarn round the hook and draw through the first 2 loops on the hook) 4 times—one triple treble has now been worked. Remove the loop from the hook and insert the hook into the next chain on fabric B.

☐ Repeat the last paragraph until the insertion is complete.

☐ Fasten off the yarn by returning the loop to the hook and drawing it through the stitch on fabric B, then fasten off in the usual way.

Lacy strip insertions

In the bedspread illustrated, straight lacy strips of crochet have been used to join together some simple, random patchwork pieces of material. The openness of the crochet means that it is fairly pliable and can easily be shaped round corners or along simple, irregular forms.

A different method of joining is needed here. The fabric and crochet strips are completed separately and then the crochet is laid so that it slightly overlaps the fabric edges. Small slip stitches are then used to secure the insertions in position.

Insertions for bedspread. Depending upon the type and width of insertion that you want, it is possible to use almost any type of yarn and a variety of hook sizes.

For the narrow insertion

Make 10ch.

1st row. Into 7th ch from hook work (1tr, 3ch, 1tr), 1ch, miss 2ch, 1tr into last ch. Turn.

2nd row. 3ch, (3tr, 1ch, 3tr) into 1ch space, 1tr into 5th of first 6ch. Turn.

3rd row. 4ch, (1tr, 3ch, 1tr) into 1ch space, 1ch, 1tr into 3rd of first 3ch. Turn.

4th row. As 2nd row, but working last tr into 3rd of first 4ch. Turn.

Repeat the 3rd and 4th rows for the length that you need.

For the wider insertion

Make 13ch.

1st row. Into 6th ch from hook work (3tr, 1ch, 3tr), 1ch, miss 3ch, (1tr, 3ch, 1tr) into next ch, miss 2ch, 1tr into last ch. Turn.

2nd row. 3ch, (3tr, 1ch, 3tr) into 3ch space, 1ch, (1tr, 3ch, 1tr) into 1ch space between 2 groups of 3tr, 1ch, 1tr into 5th of first 5ch. Turn.

3rd row. As 2nd row, but working last tr into 3rd of first 3ch. Turn.

Repeat the 3rd row for the length that you need.

PAF International

This pretty nightdress shows a lace insertion placed inside the neckline.

Overlaid insertion

Another combination of fabric and crochet is used in the dress and nightdress illustrated, either to trim a pretty neck insertion, or an overlaid application of crochet.

For an insertion, the edges of fabric must be neatened; the crochet insertion is then sewn to this edge.

For an overlaid application, the entire garment is completed in the usual way and the crochet is then applied on top of the fabric.

An overlaid application is ideal for enlivening a dress pattern, especially if it has a neck yoke. If you stick to simple shapes for the crochet you can achieve effective results but more complicated designs need careful planning. Try using a joined section of square lace motifs as given in Crochet Chapter 4, page 457 to outline the square neck of a nightdress or a simple sweetheart shape.

Yoke

For an insertion about 41cm (16″) in width across the front and about 10cm (4″) deep where three flowers meet, 7cm (2¾″).

You will need:

40gm (1½oz) of fine crochet cotton No.60 gauge.

One No.0.60 ISR (US 14) crochet hook.

To make a flower, make 10ch and join into a ring with a ss.

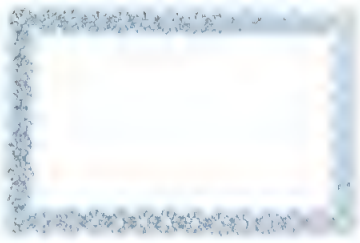
1st round. 1ch, work 15dc into ring. Join with a ss into first dc. 16 sts.

2nd round. 6ch to count as first tr plus 3ch, *miss 1dc, 1tr into next dc, 3ch, repeat from * 6 times more. Join with a ss into 3rd of first 6ch.

3rd round. Into each 3ch loop work 1dc, 1htr, 5tr, 1htr and 1dc. Fasten off.

Make 42 flowers in all, or to adjust the length of the insertion adjust to required number of flowers.

Join into two strips of 14 and two of 7, attaching two petals each side of flowers, then join the strips to form a square (fig.4).



Barbara Firth

4. Flower motifs joined to form a square of two strips of 14 motifs and two strips of seven motifs.

To work the inner border

1st round. Join yarn at the centre back to the place where two flowers are joined, 9ch to count as first dtr plus 5ch, *1dc into centre tr at top of petal, 5ch, 1dc into centre tr at top of next

petal, 5ch, 1dtr into place where flowers are joined, 5ch, repeat from * to flower before corner, work 1dc into first petal of next flower, 5ch, 1dc into next petal, 5ch, keeping the last loop of each dtr on hook, work 1dtr into join of flowers, 1dtr between two petals of flower at corner, 1dtr into join of flowers, then place yrh and draw through all four loops on hook, 5ch, 1dc into next petal, continue in this way all round, working corners as shown. Join with a ss into 4th of first 9ch.

2nd round. Work 2ss bringing start of round to centre of a 5ch loop, 2ch to count as first htr, 1htr into same loop, *4ch, 1htr into next loop, repeat from * all round, omitting the 4ch at each corner. Join with a ss into 2nd of first 9ch.

3rd round. 3ch, keeping last loop of each on hook work 2tr into next htr, place yrh and draw through 3 loops on hook—called 2tr tog to form a petal, *2tr tog into next htr, 3ch, ss into loop between 2htr, 3ch, 2tr tog into next htr, repeat from * all round, counting pairs of htr at each corner as one and ending with 2tr tog into htr, 3ch. Join with a ss to ss at beginning of round.

4th round. Ss back to top of last petal worked, 3ch, 2tr tog into top of this petal, *2tr tog into top of next petal, 3ch, ss between petals, 3ch, 2tr tog into top of next petal, repeat from * all round, working at corners 1ss between petals, 1ss between join of next 2 petals, 3ch, continue in pattern and ending with 2tr tog into top of last petal, 3ch. Join with a ss to ss at beginning of round.

5th round. Ss along to top of next petal, *5ch, 1dc into join of next 2 petals, repeat from * all round. Join with a ss into first ss.

6th round. 9ch, 1dc into next dc, turn, 2ch, 1tr into each of first 5ch, *turn, 2ch, 1tr into each of 5tr, 5ch, 1dc into next dc along border, turn, 2ch, 1tr into each of 5ch, repeat from *all round, missing 1dc at each corner and ending with turn, 2ch, 1tr into each of 5tr. Join with a ss into 4th of first 9ch.

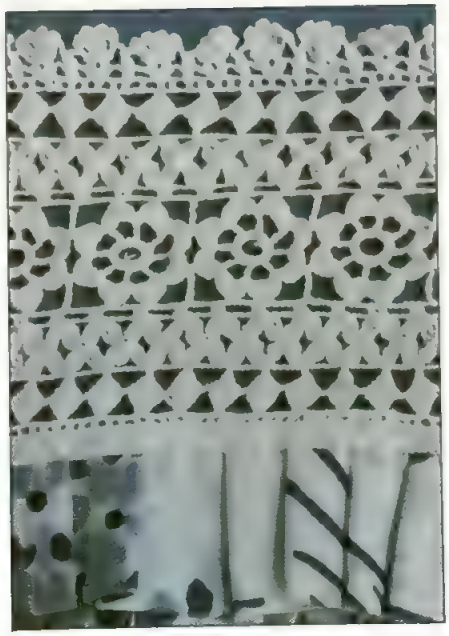
7th round. Ss over 5tr, *5ch, 1dc into corner of next 5tr block, repeat from * all round, omitting 5ch at each corner. Join with a ss into last ss before first 5ch.

8th round. 3ch to count as first htr and 1ch, *miss 1ch, 1htr into next st, 1ch, repeat from * all round, at each corner miss 2ch and 1dc, 1htr between 2dc, 1ch, miss 1dc and 2ch, 1htr into next ch. Join with a ss into 2nd of first 3ch.

9th round. 5ch to count as first tr and 2ch, *miss 1htr, (2tr, 2ch, 2tr) into next htr, 2ch, miss 1htr, 2tr into next htr, 2ch, repeat from * all round, matching pattern at corners and ending with 1tr into same htr as first tr. Join with a ss into 3rd of first 5ch.

Jerry Tubby

The yoke, used here as a collar, has been worked in No.20 crochet cotton on No.1.50 ISR (US 7) crochet hook. One flower measures 3cm (1¼"). Make required number of motifs to fit the neckline of your own dress.



Close-up of yoke insertion showing details of inner and outer borders.

10th round. 3ch to count as first tr, 1tr into next tr, 12ch, into 2ch loop between pairs of 2tr (ie the loop that makes a V) work (1dtr, 3ch, ss into first ch worked—called 1 picot) 4 times, 1dtr, then 2ch, 1tr into each of next 2tr (not the ones that are part of the V), repeat from * all round, omitting last 2tr. Join with a ss into 3rd of first 3ch. Fasten off.

To work the outer border

1st round. As inner border, but at corners work 1dc into top of petal, 5ch, 1dc into top of next petal, 5ch, 1dtr between this and next petal, 5ch, (1dc into top of next petal) twice.

2nd round. As inner border, but at corners work (2htr, 4ch, 2tr) into loop before corner.

Continue as given for inner border, but working one extra pattern at each corner, instead of one pattern less on each round, until the 8th round has been completed.

Next round. 1ch, 1dc into each st all round, working 3dc into each corner.

Next round. 1ch, 1dc into each st all round, working 3dc into each corner. Join with a ss into first ch.

Work 3 more rounds in dc. Fasten off.

Unconventional candle moulds

Since wax can be used in several consistencies such as liquid, semi-hard and whipped, it can be moulded in many, often unconventional, ways to produce candles in all sorts of surprising shapes. Light bulbs, fruit, eggs and cupcakes are only a few such shapes – and you are not even limited to using bought and improvised moulds, but you can make your own.

Making moulds

It is possible to make your own mould using cold rubber such as Silicone and mould-making kits containing instructions can be bought from craft shops. Basically the process involves coating an object with the mould material and allowing it to harden. The shape you choose must either enable you to get the object out or you must be able to cut the mould into two halves.

Grapes

This is an amusing idea for a dinner or buffet table. Use an ice tray with rounded pockets to cast the individual green wax 'grapes'. When the wax has cooled remove the 'grapes' and clean up any imperfections with a hot knife by heating the blade and then drawing the flat of the blade over the wax. The outer coating will melt away leaving a smooth surface.

Stick the grapes together around a pre-stiffened wick, either by dipping each 'grape' into hot wax and pressing it on to the next or by sticking them together with wax glue.

To make a finished glaze dip the whole bunch into undyed wax, with no stearin in it at 105 °C (220 °F).

Left: glowing cluster of grapes is a new kind of imitation wax fruit. The design is by Amina Rasheed.

Above: wax 'grapes' being removed from their mould—a rounded flexible ice tray.

Jerry Tubby

Alasdair Ogilvie

Above: Wax light bulb and ice-cream cone are not practical jokes. They are practical, if improbable, candles that can be made at home. By David Constable.

Jerry Tubby

A mould made by painting a light bulb with cold rubber is filled with wax.

Light bulb

The light bulb shown was made from a home-made mould which was cast in cold rubber round a real bulb. A dab of plasticine was used as a base and the round end of the bulb secured on it. Then the mould material was painted over the entire bulb and its screw top (except for the part covered by the plasticine).

Cold rubber has the advantage of being very elastic and when set it can be peeled back from a complicated shape such as a light bulb.

To make the candle, the mould is filled with plain white wax poured in through the hole left by the plasticine. Wick up the mould in the traditional way first (Wax chapter 3, page 1274).

The brass on the bulb is indicated with gold paint.

Ice-cream cone

This intriguing combination of fire and ice is made using a pastry icing bag with a potato nozzle to mould the wax to look like soft ice-cream. The candle is made from a sheet of beeswax and from special whipped wax which can be bought from candle-making suppliers.

☐ Roll a beeswax sheet around a pre-stiffened wick to make a cone shape.

☐ Take half a cupful of cold whipping wax, which is a water-emulsified wax; whip it with an electric whisk until it is the consistency of stiff cream.

☐ Put the whipped wax into an icing bag with a potato nozzle on the end and squeeze the wax **out** on top of the cone and around the **wick.**

☐ Prop up and **allow** about 2 days to set.

3-dimensional sculpture

With high relief sculpture, you really only have to worry about giving shape and contour to a flat outline design.

When it comes to sculpting in three dimensions you have to consider how an object looks from above, below, sideways and end on. The problem is—where to begin?

Start by thinking of each view as a silhouette. If you can, take photographs of the object you want to sculpt against the light and from as many angles as possible (or practicable—with something like a hippopotamus at the zoo!). Study the resulting outlines. You'll notice that the sideways 'profile' is the most recognizable and the rest of the outlines are probably odd shapes.

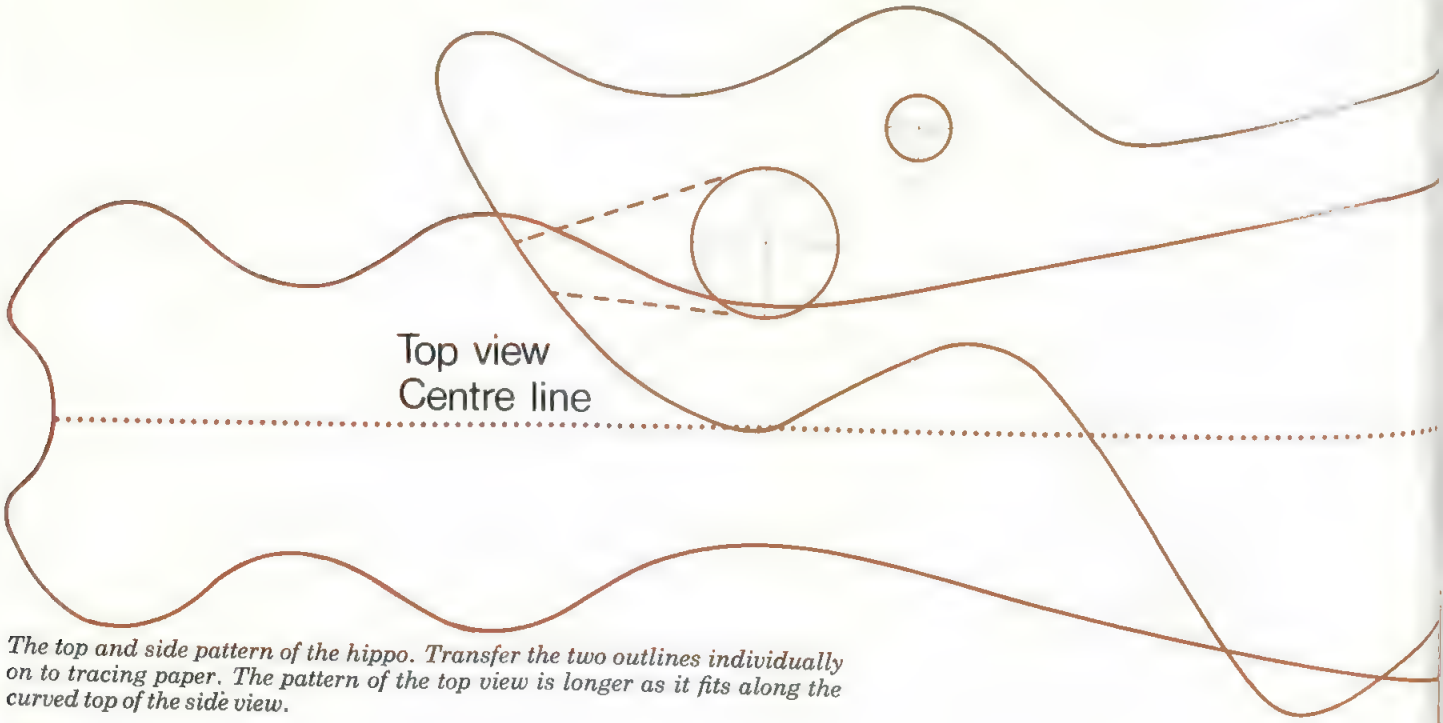
Now consider how large you want your piece of sculpture to be. Trace off and enlarge the various outlines to the size required, then draw a rectangle around each to contain it. This will give you a good idea of the overall size of the piece of wood you will need and will also show you the areas of wood that you are going to have to remove to 'release' the shape.

Plot these outlines on the sides of the block of wood. Walk round it once or twice and you'll find the hippo begins to 'take shape' within the cube. It also shows you the larger waste areas you must remove from the cube to give you the 3-dimensional form.

Start by cutting out the sideways profile. In so doing, you will of course remove the top, bottom and end-on outlines. You will therefore have to re-draw these outlines on the new curved surface. Mark also the centre since you will be working outwards from this point and trying to make the two halves roughly symmetrical. Bear in mind that you will be wanting to give fullness to the head and flanks of the hippo, and hollows to the neck and hind legs.

The hippo is simplified by the patterns and instructions given here. But you can use the same approach for any simply-shaped object. Use a design that is not too complicated and has one strong, easily-recognizable outline such as a fish or a pear which do not require surface detail.

Three-dimensional hippo worked in hardwood



The top and side pattern of the hippo. Transfer the two outlines individually on to tracing paper. The pattern of the top view is longer as it fits along the curved top of the side view.

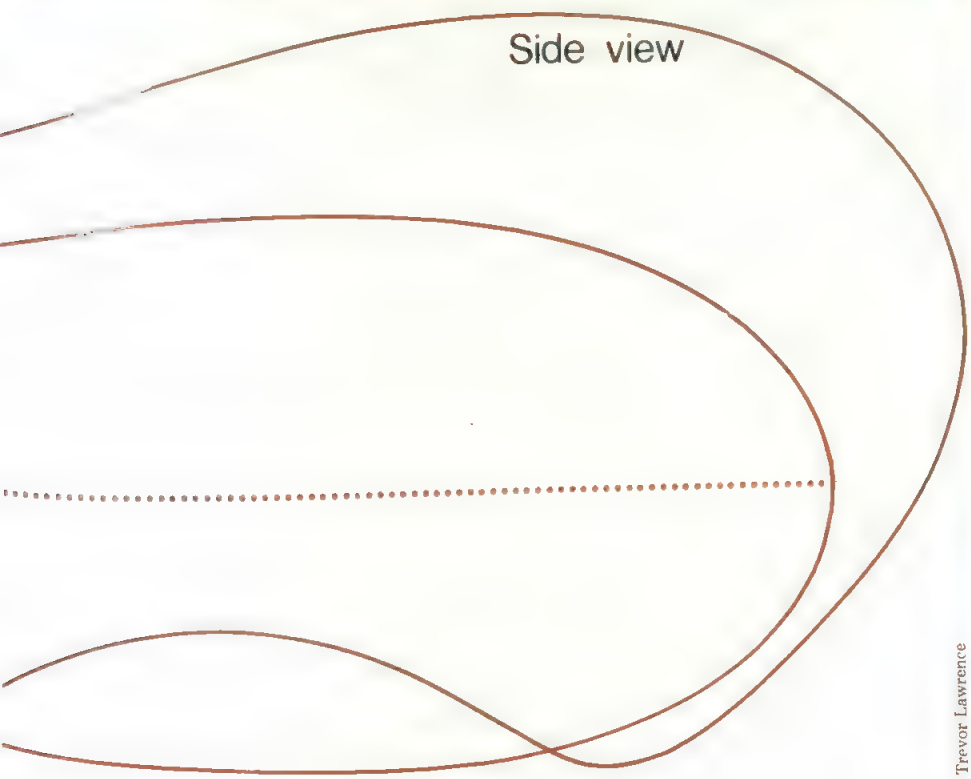
Jerry Tolan

Designed by John Matthews.

The hippo seen from above. Note the symmetrical shape.

The strongest outline is the side view which makes the hippo recognizable.

The hippo seen from underneath showing the positioning of the legs.



Trevor Lawrence

Front of hippo showing the mouth.

Rear view of the hippo.

Ray Duns

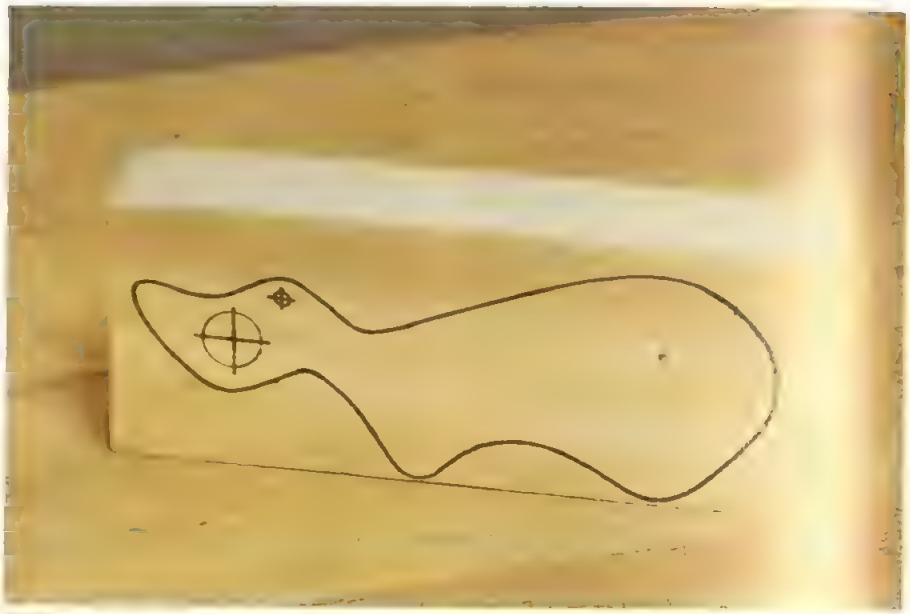
The hippo

Start three-dimensional sculpture by sculpting the hippo illustrated. The shape lends itself to sculpting as it does not require a lot of detail and its roundness makes it easily recognizable. For timber suggestions and details of tools see Modelling chapter 3, page 1228.

The completed hippo is 25.5cm (10½") long, 10cm (4") high and about 7.5cm (3") wide.

You will need:

A piece of hardwood 125mm x 100mm (5"x4"), 28cm (11") long.
Tools and equipment as in Modelling chapter 3, page 1228.
Drill with 6mm (¼") bit and a larger bit suitable for drilling a 18mm (¾") hole.
Hand saw and bow saw.
Glasspaper grades M2 and F1 or medium and fine grade sandpaper.
Tracing paper.
Carbon paper and pencil.
Wax or polyurethane varnish.



☐ Trace the pattern on to tracing paper.
☐ Trace the side and top pattern of hippo from previous page.

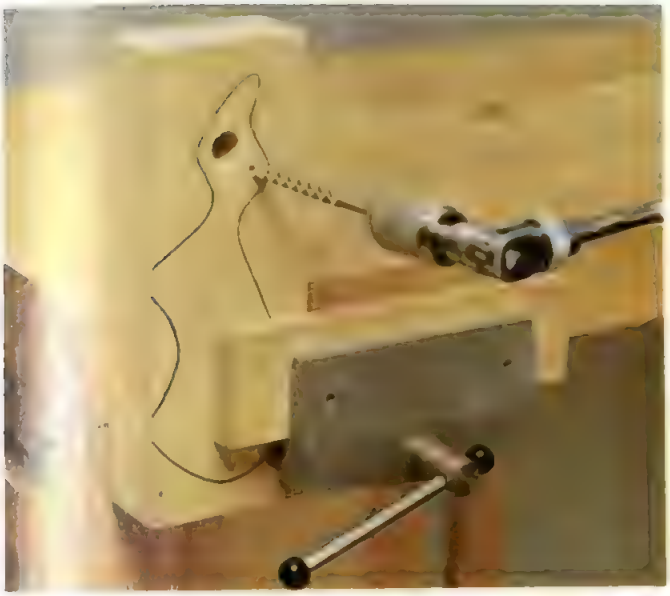
☐ Trace the pattern of the top view on to the cut-out shape of the hippo.

☐ Use the Surform tools to remove waste wood down the lines marked out on the top of the wood.

☐ Round off with Surform tools.

☐ Smooth with hand files.

Dick Miller



☐ Drill the holes for the eyes with the 6mm (¼") bit, and for the mouth use the larger bit.

☐ Remove the waste with a bow saw and work down to the outline with Surform tools.

☐ Draw lines from the larger hole towards the front to form the mouth. Cut along lines with saw to remove waste.

Dick Miller

☐ Mark out 'rounding off' lines on top, sides and bottom of the wood.

Ray Duns

☐ Then use M2 glasspaper and finish with F1 glasspaper. Apply wax or polyurethane varnish.

Facts, findings and transfers

This chapter is designed to extend your knowledge of enamels; to give more details about how they are produced; additional information on hard and soft firing enamels and kilns.
There is also more about findings and using bell caps.

Manufacture of enamels

Traditional enamels contain lead so: do not put them into your mouth; do not smoke or eat while using them; handle them carefully, in small quantities, and store in a closed container; and always wash your hands after using enamels.
The newer leadfree enamels, however, are recommended as much safer to use, especially for children, and give satisfactory results. Just take the same precautions as for lead with the reds, yellows and oranges which contain cadmium.
To produce a range of colours a basic enamel is evolved. This is a transparent, colourless enamel, usually described as 'flux'. Small additions of metallic oxides are made to the raw batch and melted in to produce different colours, such as cobalt oxide for blues, copper oxide for greens.
To give accurate control over the melting and the tint of the colour the enamels are melted in special fireclay crucibles, each containing only 1.8kg-2.3kg (4lb-5lb), at a temperature of 1100°-1150°C (2012°-2102°F). When the materials are completely combined, and the colour has been checked against a standard sample, the enamel is poured on to a steel plate. When it has cooled, the cake of enamel is then crushed and graded to obtain the small lumps used for scrolling. Pieces which are 3mm-6mm ($\frac{1}{8}$"-$\frac{1}{4}$") are described as 'cracked', 1.5mm-3mm ($\frac{1}{16}$"-$\frac{1}{8}$") as 'crushed', and the particles smaller than 1.5mm ($\frac{1}{16}$") which are used, by sprinkling on a base coat, as the simplest form of decoration as 'crystal'.
The main bulk of the enamel is crushed and ground on a porcelain ball mill to pass through a very fine mesh sieve and is supplied as a powder for application either through a sieve, dry, or by the wet pack technique, using a paste made from enamel powder (see Enamel, chapter 7, page 996).

Early problems

Many of the traditional designs have been dictated by the limitations of the enamel.
Counter-enamel. The first main problem was to produce an enamel which had a rate of expansion and contraction which would fit the metal. With incorrect expansion thin metal warps. Metal thick enough to be stronger than the enamel remains rigid, but the enamel will either craze or chip off. For this reason it was necessary to counter-enamel (Enamel chapter 2, page 190) to neutralize the stresses.
It is still necessary to counter-enamel large pieces but small ones can usually be enamelled on one side only.
Champlevé. Because the expansion of the early enamels was not correct enamel could only be used on very small areas surrounded by metal. So small depressions were gouged out of the metal, usually gold, filled with enamel and fused—the technique known as 'champlevé' and practised since ancient times.
Cloisonné. The next stage was to 'build holes' by hard soldering thin strips of metal wire on to the surface of the metal so that again small areas of enamel were enclosed by the metal wire. By filling all these holes or 'cloisons' so that the enamel rose above the wire and then grinding the surface smooth so that the metal showed, the impression was given that the whole of the surface of the metal was enamelled, thus producing the type of design known as 'cloisonné'.
Painting. It was not until many hundreds of years later that the enamels were improved sufficiently to enable a continuous area to be enamelled. When this was possible the Limoges style of decoration evolved. In this method a uniform white enamelled surface (still counter-enamelled) was painted with very finely ground enamels and then refired.
Hard and soft firing enamel. Another limitation of old enamels was that defects appeared due to overfiring if they were fired, then refired at the same temperature. To overcome this enamels were made with different firing temperatures.
A range of 'hard' enamels was made by using a higher proportion of silica (sand and quartz) to fire at about 800°-850°C (1472°-1562°F), then a 'medium' grade to fire at 750°-800°C (1382°-1472°F) and a 'soft' grade to fire at 700°-750°C (1292°-1382°F). This made it possible to fire each succeeding coat at a lower temperature than the preceding coat by using an enamel of a different fusibility.
Now that enamels have been produced which will stand several firings at the same temperature the use of enamels of different fusibility is not necessary except, perhaps, at an advanced level. It is advisable, however, when it is known that the design will involve several firings, to tend to slightly underfire the early coats.
It is not possible to recognize hard and soft firing enamels when buying. If the description is not marked on the label ask the supplier if an enamel is hard or soft and the temperature at which it will melt (this may vary from make to make). Most reds do not have a wide firing range so do not overfire.

Storage and care of enamels

When enamels are stored in powder form, they tend to be attacked by the moisture in the atmosphere and deteriorate. This deterioration of the enamel powder is the reason why early books on enamelling recommend the purchase of lump enamel to be ground with a pestle and mortar immediately before use. This is no longer essential as this fault is less liable to occur with modern enamel powder.
The first stage of deterioration is a slight opacity showing in transparent enamels, the next is pinholing of the surface and finally complete devitrification, so that the enamel does not fuse or flow.
If the enamel is 'washed', ie stirred in clean water, and the milky liquid is poured off, the very fine particles which have begun to deteriorate are removed and the enamel improved.

Thickness of copper

20 gauge (.9mm) thickness is suitable for general use and good quality blanks are of this thickness. For large panels or dishes a thicker gauge is advisable, 18 (1.25mm) or 16 (1.60mm) gauge. If design is to be produced by deep etching the heavier gauge is required. Use of a thinner gauge than 20 brings a risk of the enamelled piece being fragile, particularly if it is not counter-enamelled and, if bent, the enamel will fracture.
When firing it is advisable to use a lower temperature for a thinner metal, or a longer time for a heavy metal. For example, if it takes three minutes to fire enamel on 20 gauge (.9mm) copper

Horatio Goni

Top and centre left: two cloisonné butterflies designed by 'Sienna'. Bottom left: these feathers show a modern, decorative use of the champlevé technique. Designed by Horatio Goni. Top right: green self-cracking enamel used over a white base coat on a dish. Above: 'Arhat under a tree' is a painted enamel by Valerie Bexley. All these techniques are covered in later chapters.

at 820°C (1508°F) then, if using 18 gauge (1.25mm) copper, fire for four minutes at 820°C (1508°F).

Self-cracking enamels

Although enamels are designed to have sufficient flow to smooth out and give a flat, uniform surface special enamels, described as 'self-cracking' or 'crackle' enamels are made which produce an interesting, crazed design when fired. These are usually supplied as a powder.

The method of use is to apply and fire a coat of normal enamel.

Choose a crackle enamel in a colour to contrast with the base coat which will be seen through the gaps which will appear in the crackle enamel when fired.

Then mix the crackle enamel powder with distilled water to a consistency of double cream. Apply a coat of this on to the fired enamel, either by pouring on and draining off or by brush, to give a coat about the same thickness as the first coat.

Place the piece on the top of the kiln to dry as described for using adhesives (Enamel chapter 5, page 514). Fire as usual.

Note: The design is much more pronounced on a shaped piece such as a dish or a bowl because the design produced is a reproduction of the strain lines in the metal. Also the thicker the base coat, or the thicker the coat of crackle enamel, the more pronounced will be the design.

More about kilns

If you have not yet invested in a kiln but have been working with a blow-torch think carefully before buying. If possible choose a kiln by independent recommendation as it is difficult to evaluate a kiln without using it.

Consider, too, how much you can afford and how much you expect to use your kiln.

The cheapest kiln is the hotplate type. In this the element is embedded in the fireclay base and it usually has a light, lift-off aluminium lid. The size of piece which can be enamelled is 7.5cm-10cm (3″-4″) across and the maximum temperature is usually 800°-820°C (1472°-1508°F) but some will go to 900°C (1652°F).

Larger kilns are of two main types. The first consists of a fireclay muffle with the element as a continuous wire winding round it. This gives an even distribution of heat but not usually a fast rate of increase of temperature. Replacement muffles are available.

The second type is built of insulating bricks in a steel casing with separate elements in grooves in the floor and sides. This gives a fast rate of climb with a good reserve of heat at working temperature. Replacement elements are available.

Regulator. If a kiln is not fitted with a heat input regulator, by adjustment of which the kiln temperature can be held steady, there is a risk of overheating. When using a kiln without a regulator it is advisable to switch off the current from time to time to prevent overheating.

Pyrometer. The cost of a pyrometer, which is fitted to the kiln to indicate the temperature of the oven, may seem high in relation to the cost of the kiln, but many enamellers consider the cost well justified by the improved results of consistent firing.

A safety cut-out. Some kilns have a safety cut-out which operates so that when the kiln door is opened the current is shut off.

Points to consider:

Is the size adequate?

Is the rate of heating to 800°-850°C (1472°-1562°F) reasonable?

Does it give even heating over the whole floor space?

Is the insulation good enough to prevent the casing getting too hot for comfort?

Is it fitted with a regulator, pyrometer and safety cut-out? (It is better to purchase these fitted to the kiln rather than to add them later.)

Findings

These are the accessories that are used to hold jewelry in position, for example brooch pins in various sizes, ear clips, hooks and screws, tie clips, jump rings for attaching chains, bolt rings for necklace or bracelet fastenings and bell caps. Cuff links, key rings and adjustable finger rings also come under this heading.

Bell caps. Sometimes it is a good idea instead of making a pendant with a hole for a jump ring and chain, to attach a bell cap to the top of a jump ring and thread the chain through the loop on this. Bell caps can be obtained in various sizes and designs and add to the decoration of the pendant.

Before gluing into place with a strong adhesive, such as Araldite, it is necessary to flatten the bell cap to fit the enamelled piece (figs.1a and b). You can probably do this by squeezing the bell cap into place with your fingers but if necessary use pliers.

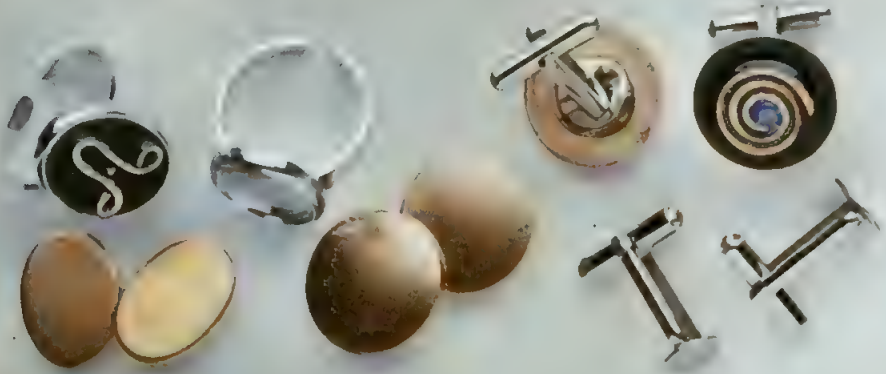
Bell caps are also very useful in making a bracelet. Having enamelled your blanks on both sides, attach one or two bell caps to opposite sides of each piece (figs.2a and b) and join the pieces together with jump rings and a bolt ring at one end and a jump ring at the other and the bracelet is complete.

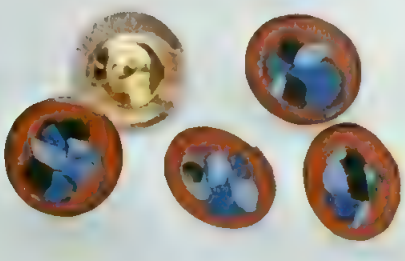
1a. *An unflattened bell cap.* **b.** *A bell cap which has been flattened*

2a and b. *For a bracelet attach one or two bell caps to opposite sides of blank.*

With a little ingenuity and experimentation you could attach a group of shapes together to form an interesting and unusual necklace.

Just a few of the many findings available for the enameller are ring sets, cuff link fittings and button shanks.





Alan Duns

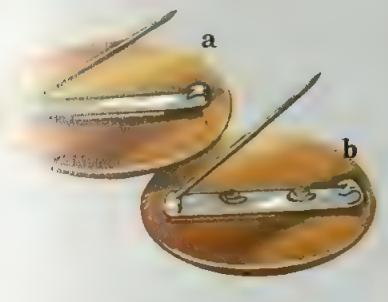
Attaching brooch pins and ear clips. If the piece has been counter-enamelled, the finding must be glued in place with strong adhesive. If the piece is a small one which has been enamelled on one side only the pin can be glued or attached by soft soldering.

Soft soldering can be done with a blow-torch, but sometimes this weakens the spring of an ear clip and also discolours the finding.

Soft soldering, however, can be done very satisfactorily on top of the kiln while you are enamelling other pieces. On many kilns the heat is sufficient to melt the solder without damaging the enamelled surface. You will need soldering flux—paste sold in a tin—and electricians' solder, in the form of wire, which is sold on a reel or in a small container.

Clean the back of the piece thoroughly. If the metal is not clean and shiny the solder will not fuse.

Using a match stick put a little of the paste flux on to the metal where the finding is to be placed, together with a small piece of solder wire (the piece of wire should be about half the length of the brooch pin) (fig.3a).



3a. *Brooch pin on top of solder wire.*
3b. *Solder wire on top of holes in pin.*

Place the piece with enamel side down on a tin lid and put the lid on top of the kiln.

Put a little paste flux on to the finding and position this on the enamelled piece. Obviously it will not sit flat because of the piece of solder but, in a few minutes, the solder will melt.

At this stage it is possible to move the finding if it is not quite in the correct position.

Using a palette knife lift the tin lid and the piece off the kiln and place it on an asbestos sheet to cool.

This method can be used to attach any type of finding to the back of a piece which has not been counter-enamelled.

Note: some brooch pins have one, or two, small holes in the bar. In this case you can lay the pin flat on the piece to which it is to be attached and put a curled piece of solder over each hole (fig.3b). The heat will draw the solder through the hole and the pin will be soldered to the piece.

All about transfers

Transfers for firing on to enamelled jewelry, boxes, matchbox covers and plaques come in a range of sizes and types, eg there are birds, flowers, animals and pictorial scenes.

The transfer consists of paper backing, printed picture and a protective coat of lacquer.

Applying a transfer

Apply the transfer to a *smoothly-fired* surface to which any additional decoration, eg a scrolled border, has already been added. Choose a hard-firing colour for the base coat for best results.

The colours on the transfer are very thin so the base colour of your piece will show through. Thus a yellow rose fired on a blue base will appear green, while a yellow rose on a paler yellow base will appear more yellow.

Soak transfer in water until it will slide on the paper—this should take about half a minute.

Slide transfer on to enamelled surface and with a soft cloth smooth out the transfer from the centre to remove excess water and air bubbles.

Leave overnight to dry naturally. This process *cannot* be speeded up.

For best results place the piece in a cold kiln, then switch it on. This ensures that the lacquer coating on the picture deteriorates gradually and does not burst into flame and spoil the picture.

If your kiln has a hole in the door you can work with it shut but if not open door from time to time to let out the fumes from the lacquer.

Remove the piece carefully from the kiln from time to time. (If the colours are clear and glossy when the piece is held in the light the transfer is fired.)

Gold transfers. As the gold looks glossy all the time you cannot apply the same test to see if the piece is ready. Therefore, start with coloured transfers, note the time they take to fire, then try a gold one and fire it for the same length of time.

Mounting cloth on panels

The technique of covering a panel with fabric can be used to mount a piece of embroidery, a batik picture or even to turn a piece of printed fa[illegible]nto a handsome picture. A large p[illegible]l would make an excellent cover-up for a badly plastered chimney br[illegible].

This chapter discusses t[illegible] main methods:—**A.** covering a piece of board with cloth; **B.** building a wooden framework and stretching cloth over

this; and **C.** covering a whole wall with a framework of wooden strips, known as battens, on which cloth can be mounted. This last treatment can make a rather characterless small room look particularly luxurious. There's no need to use expensive fabrics—even hessian, ticking or cheap Indian bedspreads can look glamorous when stretched floor-to-ceiling.

A. To cover a board

This method is more suitable for making smaller fabric pictures rather than covering large wall panels which might tend to be heavy and therefore difficult to hang. It is also useful for making notice boards. In this case, use pin board as a foundation and cover with felt.

You will need:

A piece of hardboard, insulating board or plywood of your chosen size.

Fabric 5cm (2″) larger all round than the board.

Staple gun and staples, *or* long dressmaking pins and a hammer, *or* latex adhesive (such as Copydex).

Note: if you use hardboard, a hammer and pins is the best method by which to attach the fabric to the panel. A staple gun or a hammer and pins are both suitable if the panel is made from soft insulating board, and a staple gun is best used on a wooden panel.

Latex adhesive can be used for all these, but this does mean that the edge of the fabric is spoiled and, if it is ever removed, it cannot satisfactorily be used again.

Pins will not damage the fabric and staples will do little damage.

If a very large hardboard panel is used it may need to have 50mm x 25mm (2″x 1″) wooden battens attached to the back with nails in order to keep it from bending. Assemble as shown for the wooden framework. Nails should be used in the battens when hanging the panel as it would be too heavy to hang with pins.

Take care that pins or nails do not poke right through panel.

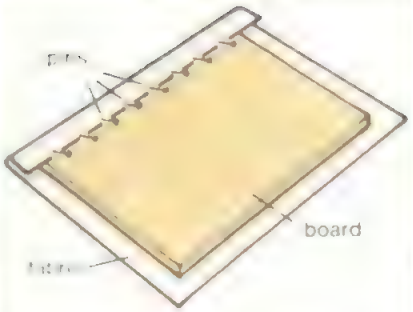
☐ Nail hardboard to the battens from the front, using nails no wider than three quarters of the combined depth of board and battens and hammering them in well. Then cover panel with fabric as described below. Allow sufficient extra fabric all round to cover depth of battens.

☐ Iron the fabric to remove all creases.

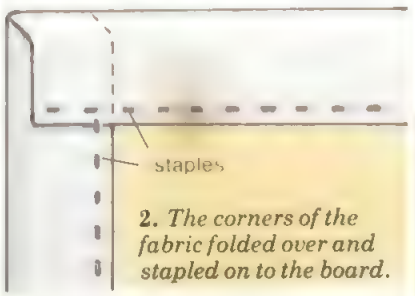
☐ Lay the fabric face downwards on a clean, flat surface.

☐ Place the panel centrally on top of the fabric.

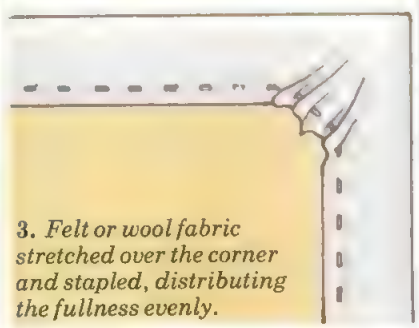
This large decorative panel is furnishing fabric mounted on board. The fabric is pulled evenly to the back of the board and pinned with staples.



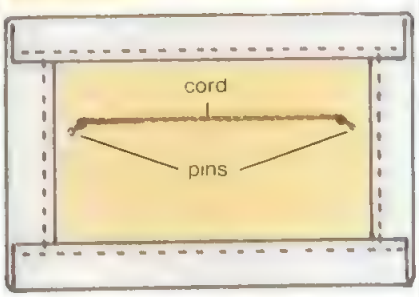
1. *Fabric folded over one side of the board with dressmaking pins placed at an angle.*



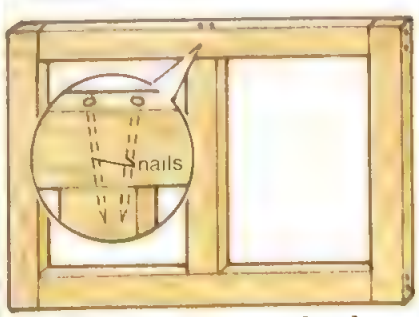
2. *The corners of the fabric folded over and stapled on to the board.*



3. *Felt or wool fabric stretched over the corner and stapled, distributing the fullness evenly.*



4. *Panel pins in position with cord stretched in between.*



5, 6. *Wooden battens glued and nailed together to make a frame, and a detail showing the nails placed at an angle into the corners.*

Paul Williams

☐ Fold the fabric over the edge of one side of the panel (fold one of the longer sides first if the panel is rectangular), keeping it as straight as possible.

☐ Staple, pin or glue it down, starting in the centre and working outwards towards the corners and stopping about 5cm (2″) from the corners of the board. If pins are being used, put them into the board at a very acute angle, against the pull of the fabric (fig.1).

Repeat with the opposite side, but this time pull the fabric tight before fixing. If the fabric is patterned or has a stripe make sure that you do not pull it harder in some places than in others as this will distort the design.

☐ Lift the panel in order to check from the front that the fabric is stretched tightly enough, but not so tightly as to bow the panel.

☐ Fold and fasten down the third side, then stretch and fasten down the fourth.

☐ Fold the corners neatly and fasten down so that the folds are hardly seen from the front (fig.2).

If you are using a stretchy fabric such as felt or wool the fabric can be pulled tightly so that it moulds over the corners; the fabric is then fixed down so that no folds are showing from the front (fig.3). Take care that the sharp corners do not pop out through a soft or loosely woven fabric.

☐ Lift the panel again and check that there is no distortion of the design and no wrinkles. Adjust corner folds if necessary.

Hanging the panel

☐ Taking two pins and, treating them as one in each case, hammer them into a hardboard or insulating board panel (as shown in fig.4) and tie cord tightly across from one pair to the other.

Use staples instead of pins for a small, light wooden panel, but use panel pins if the panel is large or heavy.

B. Making a wooden framework

You will need:

50mm x 25mm (2″x 1″) wooden battens.

7.5cm (3″) nails.

Hammer.

Wood glue.

☐ Cut two pieces of wood to the required width of the panel and cut two pieces to the height of the finished panel less the width of top and bottom strip.

☐ Glue and then nail the frame together, driving the nails in at an angle (fig.5): this makes a stronger join than if the nails were driven in straight.

☐ Measure the distance between the two longer sides and cut another piece of wood to this length. Glue and nail this in place halfway along the frame to strengthen it (fig.6).

Proceed as for covering a board with fabric.

C. Fabric covered walls

Following these instructions you can cover a wall—or a whole room—with fabric. It takes time and patience but the result will be very rewarding.

Do not attempt to do this if your walls or ceiling slope or bulge in any way, as they do in some old buildings. Check first with a spirit level and a plumb line before buying fabric and wooden battens.

You will need:

25mm x 15mm (1″x ½″) wooden battens (softwood strips).
Saw.
40mm (1½″) No.8 screws, wall plugs, drill with bit and masonry drill bit.
Spirit level.
10mm or 12mm (⅜″ or ½″) fine upholstery tacks, fabric, staple gun and staples.
Fabric glue.
Braid or straight seam binding.
Decorative tacks (optional).

Horizontal battens

☐ Cut two pieces of wood the length of the wall and drill holes about 60cm (24″) apart along the centre of the 25mm (1″) face of each piece.

☐ With the help of a friend position one batten, at the top of the wall, using a spirit level to make sure that it is level.

☐ With the batten held in position, mark the position for the screw holes by pushing a nail through each hole in the batten in turn and scratching a mark on the wall.

☐ Remove batten and using masonry bit drill holes in the wall and plug them.

☐ Screw batten to wall.

☐ Repeat with bottom batten.

Vertical battens

☐ Measure the distance between the top and bottom battens. Fix battens of this length to the wall between the top and bottom battens checking with your spirit level or plumb line that they are absolutely vertical. The distance between the centre of each of these upright battens must be the width of your fabric, less selvedges (fig.7a). These are later trimmed off.

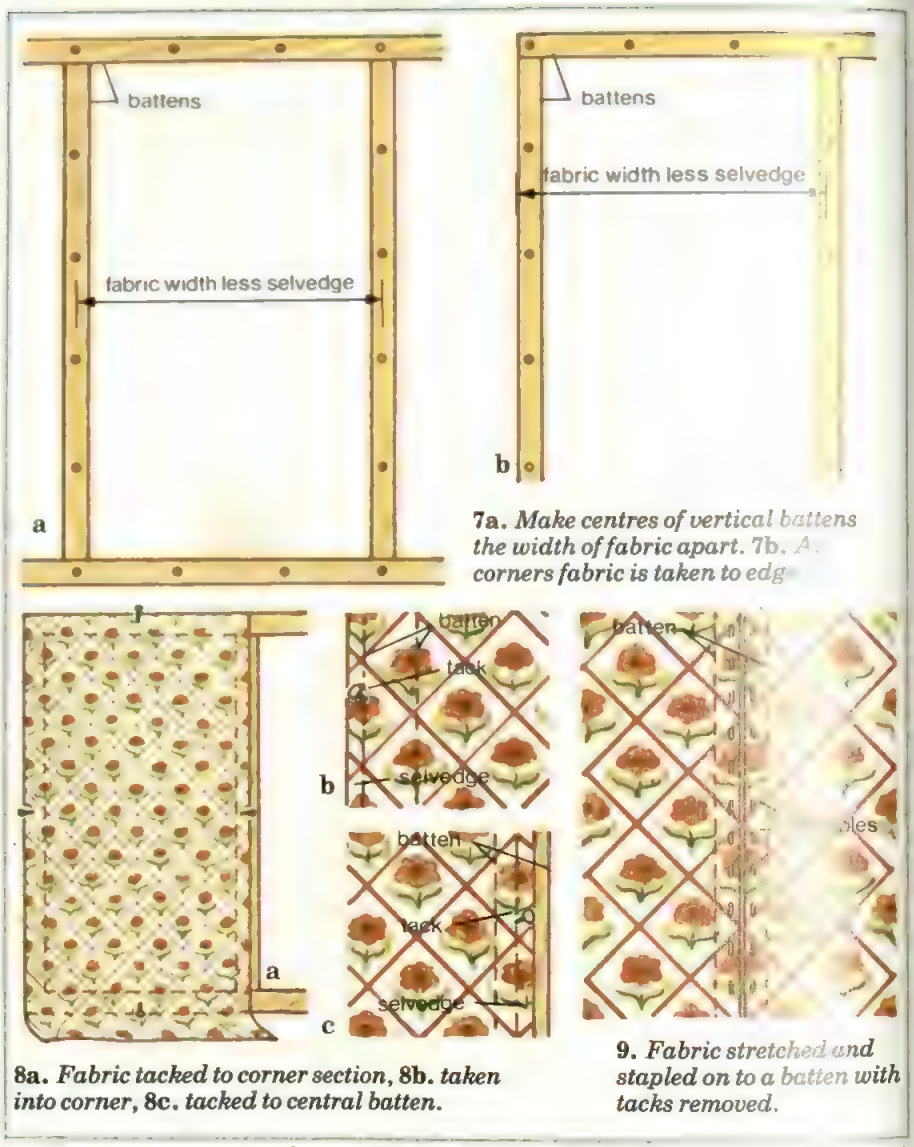
If the width of the fabric will not divide evenly into the length of the wall, divide the length of the wall by the width of the fabric, less selvedges, then divide the remainder by two.

☐ If the length of the wall divides into an odd number, plus the remainder, place the first panel centrally on the wall.

☐ If the length of the wall divides into an even number, plus remainder, place a batten centrally on to the wall and work from the centre.

In both cases it would be better to choose an unobtrusive braid or tape to neaten as the width of the panels would be accentuated by a bright contrast.

Note: the fabric is taken up to the outer edge of the batten on each end



7a. *Make centres of vertical battens the width of fabric apart.* **7b.** *A corners fabric is taken to edg*

8a. *Fabric tacked to corner section,* **8b.** *taken into corner,* **8c.** *tacked to central batten.*

9. *Fabric stretched and stapled on to a batten with tacks removed.*

panel (at the corner of the wall) (fig. 7b) so the first and last pair of battens will need to be slightly closer together than the others.

Fixing fabric

☐ Cut a piece of fabric the height of the wall, plus at least 7.5cm (3″) (or what is left between pattern repeat).

☐ Mark half-way point on first pair of upright battens and a point half-way between on top and bottom battens.

☐ Mark centre of top and bottom of piece of fabric and centre of each side, less the extra at bottom.

Temporary-tack the fabric to the battens at these four points by driving the tacks only half-way home (fig.8a). Place tack on first side (batten at corner of wall) at outer edge of batten and tack on other side 3mm (⅛″) in from the centre of the batten. The tacks should be placed at *inner* edge of selvedge (figs.8b and c).

☐ At the top, pull fabric taut and temporary-tack at the top corners only. Fill in with more tacks along top edge at 15cm (6″) intervals.

☐ Check that top of fabric is really taut and grain is straight and then put in staples, on this edge only, as close together as possible and 6mm (¼″) in from the edge. Remove the temporary tacks on this edge.

☐ Pull fabric down at bottom and working from the centre, temporary-tack (you will probably have to remove the temporary tacks you placed at the sides). Keep fabric as taut as possible and check that the grain of fabric is straight.

☐ Temporary-tack first one side and then the other.

☐ Staple at inner edge of selvedge at bottom and sides. Remove tacks.

☐ Trim off excess fabric at bottom.

☐ Put on second length in the same way, so that inner edge of selvedge lines up with centre of batten. Tack and staple through single fabric.

☐ Trim off selvedges (fig.9).

Covering joins

☐ Cover raw edges with braid. Start with the verticals. Tack braid at top of batten, driving tack right home. Stretch the braid tightly to the bottom and cut off.

Jessica Strang

Indian bedspreads covering the walls of a bedroom will give a decorative and warm atmosphere. Note how the borders are used to maximum effect.

☐ Leaving tack in position, smear glue down the back of the braid. Pull braid taut and tack at bottom. Run your finger down the braid to glue it firmly in position.

☐ When all vertical strips of braid are in position, glue braid to cover raw edges at top and bottom and the ends of the vertical strips. Turn under the raw ends of the horizontal strips of braid and just temporary-tack the ends. Remove tacks when glue is dry. Alternatively, tack ordinary straight, seam binding over the raw edges, tacking it down with decorative tacks. Buy a colour to match your fabric.

Spattering with aerosol paints

Spatter painting is a straightforward way to use colour and can be done easily and with many special effects by means of aerosol paints. The spray from an aerosol is much finer than that produced by conventional spattering and it is easier to control. The random, coarse texture of ordinary spatter is lost but a clearer definition is gained and a much more subtle grading of colours is possible.

Types of paint. Aerosol paints come in several colours and in both gloss and matt finishes. They are usually oil-based, hard wearing and durable and can be applied to all sorts of surfaces—furniture, walls, floors, mirrors. Some are specially designed for use on cars but work equally well on metal boxes and filing cabinets. Since aerosol paints dry almost at once they are especially suitable for vertical surfaces such as walls where enamel paint is usually inclined to drip.

Jerry Tubby

Designs

Spraying around various everyday objects and cut-outs and then removing them to see how they print out is part of the fun and challenge of spattering. Stencils and reverse stencils can be cut out of paper and used to mask off areas as in conventional spattering. With an aerosol, however, a quick spray with the paint is all that is needed to fix the outline.

Shading is another advantage gained by using aerosols. Landscapes like the one pictured can be created by tearing bits of paper into mountainous shapes, putting them in place and spraying the printing surface lightly; then move the shapes to a new position and spray again. This way a sense of depth and shadow can be incorporated into a picture or design.

Household decorations. Lampshades are one of many paper surfaces that can be spattered. It is advisable to spatter the paper pattern before mounting it on a frame, but made-up shades can also be spattered provided any angles in their shapes are taken into consideration.

Painted chests of drawers are another suitable surface for spattering, as are trays and canisters. Leaf outlines surrounding a mirror or a spray of underwater sea ferns on a plain bathroom wall can be executed in a few minutes and with little effort.

On vertical surfaces either paste on the design shapes with washable paste or use double-sided tape which will stick to both the surface and the design image.

On curved surfaces such as jars, canisters and wastepaper baskets the edges of the design motif should be carefully secured against the surface so that paint will not penetrate beneath. Double-sided tape can be used or you can paste the motif down with washable paste and then remove it after you have sprayed and before the paste has dried. Simply wipe off residual paste with a damp cloth. Another solution is to cut the design image out of contact paper.

Picture making. This is a creative and fascinating use of spattering. Silhouette shapes and natural forms can be moved round, as previously described, to make subtly shaded areas and to build up a background such as hills, a forest or houses. Then you can paint or paste figures in the foreground. The results may have all the delicacy of a Chinese watercolour.

Lampshade designed by Alan Wheeler was decorated by spattering with an aerosol on to paper which had been cut out from a lampshade pattern. The hazy effect is caused by allowing some spray to hit previously masked areas.

Examples of aerosol spatter painting: the ferns have a well-defined yet mysteriously cloudy quality peculiar to the medium while the composite picture (top) illustrates how depth can be created by shading techniques. All are by Alan Wheeler.

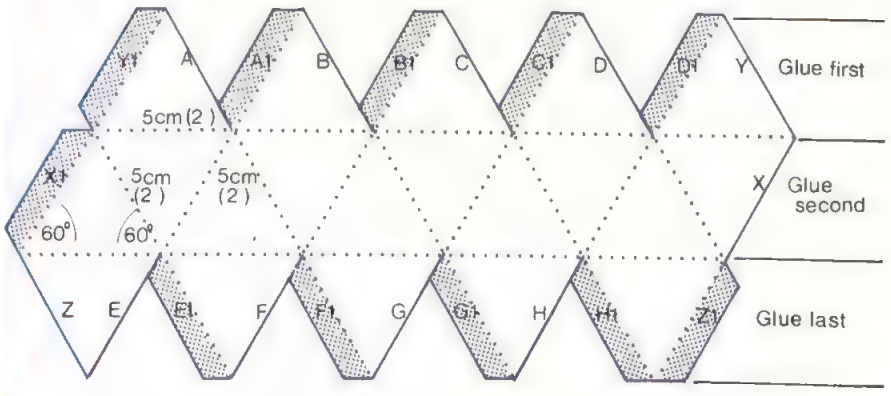
Melvin Grey

Twenty faces of the icosahedron

Design know-how 47

Alasdair Ogilvie

Left white, the finished icosahedron makes an attractive mobile.



1. *The icosahedron as it should look mapped out on your piece of card.*

Trevor Lawrence

There are all sorts of geometrical, three-dimensional solids which can be made from thin card, and an icosahedron, or twenty-faced figure, is one of these. It is constructed from twenty equilateral triangles on one strip of card. The card is scored along the edges of the triangles, then folded round and glued. The different faces of the figure can be painted or coloured. Another variation is to make a calendar (a face for each month and eight sides left over for illustrative scenes), or it can be used as part of a mobile.

An icosahedron

See photograph.

You will need:

Thin card, 30cm x 15cm (1[illegible]

Scissors.

Trimming knife such as a Stanley knife.

Rubber solution adhesive such as Gloy Studio Gum.

Ruler, pencil, protractor.

Start by building up the interlocking triangles following fig.1.

☐ Draw a pencil line lengthwise across the card 5cm (2″) from the bottom edge.

☐ To make the centre row of triangles start 6mm (¼″) in from the left-hand side, draw a 5cm (2″) line at a 60° angle on top of the line.

☐ At a further 5cm (2″) draw another 5cm (2″) line at a 60° angle (bearing left this time) to join up with the first. The first equilateral triangle has been drawn.

☐ Draw another four and a half triangles along the line in the same way and touching each other at the corners of the base as shown.

☐ Draw a straight line across the tops of the triangles. This will be 25cm (10″) long, and is the base line for the next five triangles.

☐ Draw in the top five triangles in the same way as before, following fig.1.

The remaining triangles are drawn at the bottom of the card. Turn the card round for ease of working and draw in another five triangles.

☐ Draw in glue flaps (these are marked in as shaded areas). Draw each flap about 6mm (¼″) deep.

☐ Number each flap and the edges of the figure as marked.

☐ Cut out the icosahedron.

☐ Lightly score along the pencil lines (the outer surface) with a trimming knife and using a ruler as a guide.

☐ Bend the card along the score lines (keeping the cut side outermost) and glue each flap to its appropriate edge, A to A1 and so on. Start with the top line of triangles first, then the middle sections and finally the bottom sections. Glue Z and E last.

The icosahedron is complete and ready for decorating. If you want a larger model it can easily be made by increasing the size of the triangle.

Creative ideas 47

Brightly belted

Bright and cheerful to wear, this belt also provides a good opportunity for practising colour changes in knitting. Second-hand knitwear can provide the materials.

Size 12 needles (US 1) and 4 ply wool (or similar thickness) are recommended as they produce fabric firm enough for a belt.

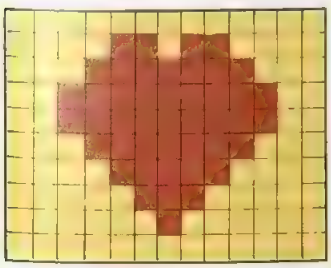
Remember that to join in a new colour you loop it round the old colour, drop the old and continue with the new.

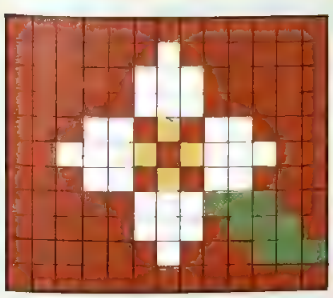
To change colours in stocking stitch. When working the knit row keep each extra colour at the back until required. Then knit the last stitch of the first colour, take this strand of yarn over the second colour and drop it, pick up the second colour under the first and knit the next stitch.

Repeat this process for a purl row but keep the extra colours at the front of the work.

As you knit in the various colours, carry the extra strands across the back of the work and keep them fairly loose (but not in great loops) so the knitting will not pucker.

Two simple motifs to knit—a flower and a heart.





Trevor Lawrence

Camera Press

Pleated paper lampshades

Pleated paper lampshades were all the rage in the 1930s. There was something very extravagant-looking about them —and, certainly, a lot of material was needed to make them.

The vogue for pleated paper shades is back again, but the new shape is less exaggerated than before: no longer so reminiscent of a sunray pleated skirt tapering from tiny wasp waist to very full hemline, but a more sophisticated, gently fanned shape—which is both easier and less costly to make.

Choosing a frame

Although the support of a lampshade frame is normally unnecessary for a paper shade, it is essential when pleats are involved. This is because a pleated paper shade is not glued to the rings in the usual way but simply rests on a frame. It, therefore, needs struts as well as rings for support and to hold it in shape.

Choose a straight empire shade (not a coolie shaped shade). The struts must, of course, be straight not shaped, and the bottom ring must be of larger diameter than the top ring—but the difference need not be very considerable. The marbled paper shade illustrated here is on a frame with a top ring diameter of 38cm (15″) and a bottom ring diameter of 51cm (20″).

The small white pleated shade, also photographed, is on a frame with a 15cm (6″) top ring diameter and a 25.5cm (10″) bottom ring diameter.

Suitable papers

It is essential to choose a fairly crisp paper which holds a crease well. Wallpapers and papers with a shiny finish are mostly unsuitable because, although they fold quite easily, the top surface of the paper is inclined to crack in the process of folding.

Papers which are technically described as being between 120g/m² and 170g/m² (meaning that the paper weighs between 120 and 170 grams per square metre) are of ideal weight for making pleated shades. Cover paper, lightweight index board and coloured text paper are available in these weights and have a matt finish which folds well without cracking. Available from art shops and high class stationers in sheets measuring about 640mm by 900-970mm (25″x 36″-38″), these papers come in an excellent range of colours which include pastel as well as vibrant hues. KeayKolour cover paper offers a particularly good choice.

If your heart is set on using a patterned paper, go to a shop selling a wide selection of gift wrapping papers. Choose one of the heavier weight papers and remember to avoid those with surfaces liable to crack in folding. Hand marbled paper is usually heavier than most other papers that fall into the 'gift wrapping' category. Marbled paper is also more expensive than the average wrapping paper—but it is uniquely beautiful and the cost of a few sheets plus lampshade frame and decorative cord are negligible when compared to the price you would be asked to pay for a similar ready-made lampshade.

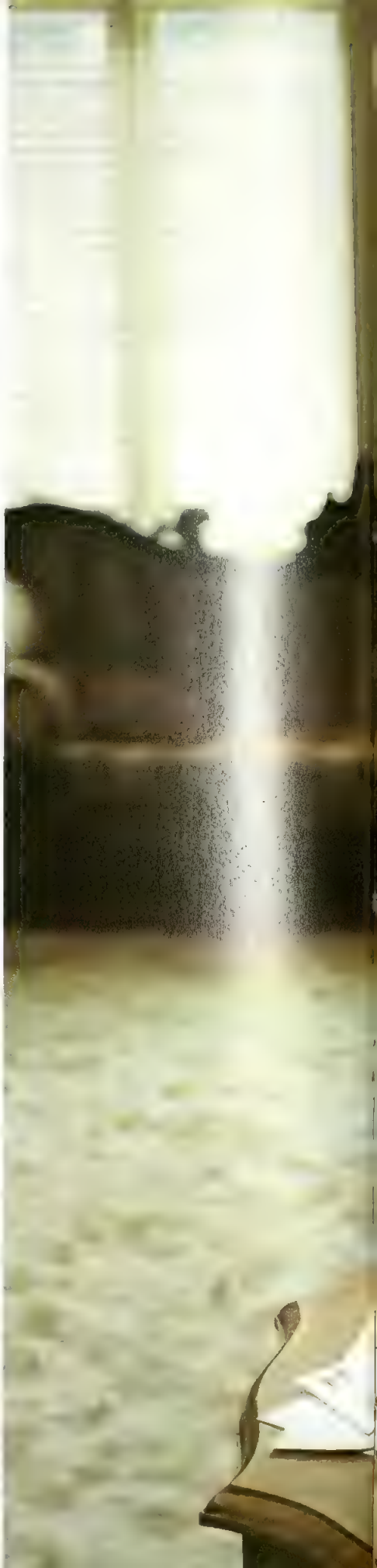
Cutting your paper

It is unnecessary to make a pattern when making a pleated paper lampshade, but it is important that your paper is the correct size.

Before pleating, the cut-out paper will be an oblong shape measuring twice the circumference of the top ring multiplied by the depth of the frame struts plus 5cm (2″).

This means a large pleated shade will require two or more sheets of your chosen paper joined together. Use a thin coat of evenly spread paper adhesive for joins and allow 6mm (¼″) overlap for plain papers; a little more or less if necessary to make a neat match when patterned paper is used.

The finished shade is deliberately intended to be longer than the frame struts. This is partly for structural reasons and partly to hide the rings from view in the finished lampshade. The rings of a lampshade are normally covered with adhesive cotton tape and



Pleated lampshade, designed by Lindsay Vernon, is made in marbled paper and tied with silk cord. The lamp base is a wide-mouthed glass flagon planted with greenery. A large wine-maker's cork inserted in the flagon mouth is drilled to take the stem of an adjustable light fitting.

a paper lampshade is glued on to the tape covered rings. But, since a pleated paper shade merely rests on the lampshade frame, there is, of course, no need to bind the frame rings with tape. However, you can colour the rings with a quick drying cellulose paint (car paint) if you wish.

To make a pleated shade

You will need:

A straight empire lampshade frame.
Lampshade paper cut to size as already described.
Graph paper, slightly larger than the lampshade paper, marked in 2.5cm (1″) squares.
Masking tape.
Paper adhesive.
A pair of scissors.
Pencil and ruler.
Leather punch.
Thin decorative cord long enough to go round both rings and allowing about 45cm (18″) for finishing.

☐ Lay the graph paper horizontally on the work table. Lay the lampshade paper on top (reverse side of the lampshade paper facing upwards), placing it so that some of the graph paper shows at top and bottom. Hold in place with small pieces of masking tape (fig.1).

1

Alan Duns

☐ Working from left to right, rule lines in soft pencil down the lampshade paper, using the 2.5cm (1″) division marks on the graph paper as your guide for accurate alignment of the ruler as shown.

☐ Carefully remove the masking tape, set aside the graph paper, and begin pleating the lampshade paper. Because it is essential to keep the folds square with the edges of the paper, it is easier to do the pleating in two stages: first making all the 'mountain' folds at 2.5cm (1″) intervals, then making the intermediate 'valley' folds.

☐ Keeping the reverse side of the lampshade paper facing upwards, make a 'mountain' fold along the first pencil-ruled line. Work slowly and carefully, creasing the paper firmly between your fingers and thumbs at the top edge and gradually working your way along the pencil line towards the bottom edge or make the creases with fingers only as shown in fig.2.

2

☐ Using the same technique, now make a 'mountain' fold along the second pencil line. (Do not under any circumstances attempt to make the alternate 'valley' folds at this stage.) Then repeat along the third line, and so on until all the 'mountain' folds are completed.

☐ To make the first 'valley' fold, place the second 'mountain' precisely on top of the first 'mountain' fold. Start at the top edge slowly and carefully pinching the two folds together, between fingers and thumbs, gradually working your way along to the bottom edge (fig.3).

3

This action will automatically create an intermediate 'valley' fold, but the crispness of the 'valley' fold can be improved by then turning the paper over and pinching the new fold into a sharp crease.

☐ Now align the third 'mountain' fold with the second, creasing the folds together as before, then turning the paper over to pinch the second 'valley' fold into a sharp crease.

☐ When the paper is completely pleated join the two ends, sticking them together with a thin coat of paper adhesive. The ends should overlap by 1.25cm (½″)—i.e. one pleat—so it may be necessary to trim one end in order to make the pleats lie correctly.

☐ Then make holes for threading the decorative cord or ribbon. Set the leather punch to a hole size large enough to insert the cord easily without tearing the paper.

☐ Working on the *right* side of the paper, punch a hole about 1.25cm (½″) from the top edge through the first 'mountain' fold (fig.4).

4. Punching holes through 'mountain' folds on the right side of the paper creates a shallow pleat effect ideal for showing off decorative cord. Deep pleat method makes cord almost invisible.

☐ Punch holes through the remaining 'mountain' folds along the top edge, then punch holes in a corresponding position along the bottom edge of the pleated paper.

☐ If, however, you wish to accentuate the pleated effect, punch the holes through the deepest part of the pleats—ie the 'mountain' folds on the *reverse* side of the paper (fig.5). In this case, holes are punched before the two ends of the pleated paper are glued together to make the lampshade shape (fig.6).

5

☐ Cut a piece of cord equal in length to the circumference of the top ring plus about 23cm (9″) and thread it through the prepared holes at the top of the lampshade (fig.7).

Thread the remaining cord through the prepared holes at the bottom of the lampshade, then slip the shade over the frame as shown in fig.8.

8

☐ Pull the top cord gently but firmly until it snugly fits the circumference of the top ring. Secure with a knot, then tie a bow.

☐ Pull the bottom cord and secure in the same way.

☐ Finally, ease the pleats a little if necessary to ensure that they are evenly spaced round the lampshade.

Right: plain white paper shade with deep pleat effect is mounted on glass flagon. Convert to take a light fitting as described on page 1318.

Liz Whiting

Beginning to throw pots

Clay 30

The word 'throwing' refers to the centrifugal force which is created by the revolving wheel head and which throws the prepared clay outwards. The principle of creating a pot on the wheel is to use your hands to oppose this force with just the right amount of restraint to make the clay spin in the centre.

Watch a professional potter at work and the art of throwing will look simple, but in fact a lot of skill and practice are involved. It is necessary to be totally and confidently in control of your hands, and therefore of the clay. Regular practice, daily if possible, will give you the 'feel' of the technique. Once the art of throwing has been mastered the wheel allows the potter to create a wide variety of shapes relatively quickly, and also to work with heavy masses of clay to produce large pots, however the best shape to start off with is the simple cylinder because, apart from bowl shapes, it is the basis of almost any thrown form.

Making a simple cylinder

The clay should be prepared for working as described in Clay chapter 7, page 286.

Before hollow shapes can be made on the wheel the clay must be centred. This means that the ball of clay must be revolving smoothly and evenly in the exact centre of the wheel head. If it is not perfectly centred to begin with, the clay will be impossible to control. Begin with half a dozen balls of clay and practise with these. Be prepared to waste clay in these early stages.

You will need:

About 6 balls of prepared throwing clay, each about 250gm (½lb) in weight.
Small bowl of water.
Cutting wire.
Small sponge.
Straight-sided wooden tool with pointed end for trimming.
Wooden board to take the finished pot.
Newspapers to prevent the pot from sticking to the board.

Centring the clay

Arrange materials and tools so that they are within easy reach. Place the bowl of water behind the wheel head so that you can moisten your hands regularly as you work without having to stretch too far (fig.1).

Dampen wheel head but don't wet it. Moisten your hands.

It is important to keep the clay damp all the time or your hands will stick to it, but if you make it too wet it will turn into unworkable mud.

☐ Press a ball of clay firmly on to the centre of the wheel head, and then set the wheel going quickly, in an anti-clockwise direction.

1. *Getting ready to throw the prepared clay which must be centred on the wheelhead. The wheel must be revolving smoothly before placing the clay.*

2. *Apply equal pressure with both hands to firm the clay down on the wheel*

3. *To cone the clay, curve both hands around it and push from the wrists*

4. *Pressure from the hands will force the clay upwards into a cone shape.*

5. *Depress the cone with the left hand, pull it to the centre with the right.*

☐ With left hand cupped around the clay and the right hand along the top apply equal pressure with the palms. This movement should firm the clay down and set it spinning evenly (fig.2). Remember to keep the arms and hands as steady as possible. Rest the arms against the wheel tray and support the elbows against the body. Concentrate on keeping the hands rigid. At first they will tend to wobble about, but with practice you will be able to control them.

Coning

The next movement is called coning.

☐ Clasp both hands around clay and push forward from the wrists.

This should force the clay upwards into a cone shape. As the clay rises, follow it upwards with your encircling hands (figs.3 and 4).

Now depress the cone with palm of the left hand, at the same time using the right hand to pull the clay towards the centre of the wheel (fig.5).

This up and down coning movement should be repeated several times to work the clay into a good, even consistency and to remove any air bubbles that may still be trapped in it.

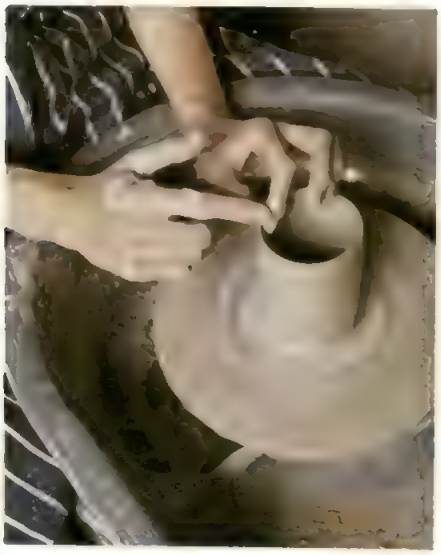
Be careful not to allow a hollow to form in the clay at this stage or air may be trapped in the walls of the pot, causing it to crack when fired. If a hollow does form, continue the coning movements with firm pressure until the clay is once more of an even consistency.

When the clay has been worked several times in this way it should be safely centred. When it is centred it will spin

6. *Support clay with left hand and press into it with right forefinger.*

7. *Keeping the finger at the bottom of the pot, pull it directly towards you.*

8. *Note the position of the ha[illegible] the pot is pulled gently upwa[illegible]*



11. *When you have made a good cylinder, neaten the rim with the fingertips.*

12. *Trim surplus clay from the base of the pot with a pointed wooden tool.*

13. *Carefully mop surplus water from inside the pot with a small sponge.*

smoothly when the hands are quite still. Until this has been achieved there is no point in going on to the next stage. An uncentred pot will wobble, getting progressively more out of control as you try to open it up. Only when you are confident that the clay is centred and under control should you go on to the next stage of hollowing it out.

Hollowing out

☐ Cup left hand around the clay to support it. With the first finger of the right hand make a depression in the centre of the clay. Use the thumb of the left hand to keep the finger steady and press down into the clay until the fingertip is almost down to the wheel head (fig.6).

☐ Keeping finger at the bottom of the pot, pull it directly towards you (fig.7). This movement forms the base of the pot. At this stage the side wall of the pot should be about 2.5cm (1″) thick.

If the pot is still in control and spinning evenly, you can start to pull up the walls. If you have lost control of the clay it may be necessary to start again from the beginning.

Pulling up the walls

When you are ready to pull up the walls of the pot you should slow down the speed of the wheel head. With experience you will learn to judge the most suitable speed for the work you are doing.

☐ Place fingers of the left hand against the inside wall of the pot and the knuckle of the right forefinger against the outside. With the hands in this position squeeze the sides of the pot upwards (fig.8). This movement gives the pot height and thins the walls.

☐ Move hands upwards slowly and steadily with the clay, applying even pressure all the time. Do not allow the top to flare out or you will lose control (fig.9).

If this happens, discard the 'pot' and begin again with a new piece of clay. The clay from the spoiled pot can be re-used at a later stage, when it has been rested and re-prepared.

Checking the cylinder

☐ When you have achieved a good, straight cylinder with even walls, take a cutting wire and slice through the pot from top to bottom.

☐ Separate the two halves and check evenness and thickness of the walls and base (fig.10). The pot should be slightly thicker towards the base, but if the base is too thick it will dry unevenly and crack.

By checking your early efforts in this way you will be able to see how you are progressing. Practise until you are

9. *If the top flares out like this, you will have to begin again.*

10. *To check the evenness of walls and base, cut the cylinder in half.*

Use the finished cylinder as a vase, a tumbler, or even to store pencils.

14. *Stop the wheel. Push a cutting wire between base of pot and wheel head.*

15. *Slide the pot off the wheel head and leave it to dry out.*

able to produce a good cylinder.

Removing the pot from the wheel

When you are ready to remove a pot from the wheel, first neaten the rim.

☐ With a fingertip of the left hand just inside the rim and a fingertip of the right hand resting lightly on the rim, apply very gentle pressure until you have achieved an even rim (fig.11).

☐ With pointed wooden tool, trim surplus clay from the bottom edge of the pot (fig.12). This does not only neaten the finished pot, it also makes it easier to cut under the base.

☐ Reduce wheel speed and use the small sponge to mop any surplus water from the inside of the pot (fig.13).

☐ Stop wheel. Take the cutting wire in both hands and press it firmly on to the wheel head in front of the pot. Push it away from you between the base of the pot and the wheel head (fig.14).

☐ Add a small amount of water to wheel head and repeat the action, pushing the water through with the wire.

☐ The pot should now slide easily off wheel head (fig.15). Slide it on to a wooden board, covered with newspapers to prevent it from sticking, and set it aside to dry out.

Making a set of cylinders

When you are able to throw a good cylinder, try to make several the same size.

Weigh out a specific amount of clay and work to a pre-determined measurement. For instance, you should be able to throw a cylinder about 7.5cm x 6.5cm (3″ x 2½″) from 250gm (½lb) of clay, and a cylinder about 10cm x 7.5cm (4″ x 3″) from 350gm (¾lb) of clay.

It takes a lot of practice to be able to produce matching cylinders, but all the time you are working you are learning to understand both the clay and the wheel and how to control them.

It is also a good idea to practise taking pots off the wheel so that when you throw a pot you want to keep you can remove it with confidence.

Fire and glaze the finished cylinders using the techniques described in Clay chapter 19, page 842.

Simple though the shape is, a well-made cylinder is an effective vase. Make a set of six and use them as drinking tumblers or handleless mugs.

Adapting basic cylinders

Later chapters will describe how to adapt this basic cylinder form to other uses—how to add lips and handles and eventually how to make a simple but attractive coffee set.

Making wash-out pictures with ink resists

Ink resist is a simple method of painting which gives a professional-looking appearance to a design, even if you are not a skilful painter.

Basically ink resist works like all resist processes; that is to say that parts of the design are masked out (in this case with poster paint) and the rest of the surface is then covered with colour (in this case ink).

When the poster paint or resist is re-

mo… its shape is left on the printing su… along with a pale shade of re… l colour.
As … all resist methods; surprise is an… ortant element. Since the poster pa… will lift when the work is put u… water, the designer cannot tell ex… what it will look like until the wi… rocess is finished.
A… r name for this is wash-out since th… awing is literally washed away.

To make an ink resist drawing

You will need:
Cartridge paper.
Various poster paints.
Various waterproof, coloured inks.
Drawing board or hardboard cut to size.
Gummed brown paper tape—5cm (2″) wide.
Fixative spray.
A selection of brushes.

The cartridge paper should be of good quality in order to withstand being placed under water and should be about 2.5cm (1″) larger all the way round than you need.

Draw your design very lightly on the cartridge paper since heavy pencil lines will show on the finished work. A stencil type of design will be the most effective as this will allow the ink to flow right into it.

Using thick poster colour, paint in the design. Use a darker shade of the colour you eventually want (ie for pale green use dark green), see fig.1.

Allow the poster paint time to dry.

Choose the colour of ink you want for the background. Remember that the painted design will be pale, so if you want contrast, choose a dark tone of ink.

Cover the entire design, and the background, with ink. Work quickly, without leaving any hard lines, as ink dries rapidly. Do not worry if the whole design is completely obliterated (fig.2). An interesting effect can be achieved by using more than one colour ink. It could be painted on in stripes or checks, or dripped on in splodges so that the colours run into each other.

☐ Allow the ink to dry.

☐ Place the paper into a sink or bowl full of cold water and brush gently over the surface. The poster paint will lift off, taking the ink with it but leaving a tint of the original colour. The ink covering the background will not wash off.

For extra interest and texture do not brush off all the loose paint from the design.

☐ Carefully lift the paper from the water and lay it on the board. Using the gummed tape stick all four sides down and leave to dry. The paper will shrink as it dries and this method of sticking down the edges will stretch the paper until it is completely flat again.

☐ When it is dry spray the fixative all over the design and leave it to dry for a couple of hours. This will hold any little bits of paint which add interest to the design and prevent them from flaking off.

☐ Cut the paper from the board and trim the edges. The poster paint and ink resist process is complete (fig.3).

3

1, 2, 3. *The impressionistic daisies in the picture opposite have the appearance of some sophisticated printing technique. In fact, they are the result of a remarkably simple process. The drawing is made with poster paint, then the surface is covered with ink. When the drawing is held under water, the poster paint washes off leaving the shape behind. By Susan Norris.*

Alan Duns

Tin plate modelling

Steve Bicknell

One of the problems with metal work is the fact that a specific type, shape or size of metal might not be readily available but this can also be an advantage. If you collect odd bits and pieces you may find that some will lend themselves to a design or an abstraction of a design. For example, lay any odd bits of metal on the trace pattern given for cockerel overleaf—they need not fit exactly—just try to assemble them in such a way as to retain the lines of the design. Solder the pieces together and you will find that although the result is not realistic, it does give the impression of the cockerel.

Tin plate is very easy to solder and, if it is thin enough, it is easily worked, ie cut and shaped.

Texture and surface detail

The objects illustrated were made from .3mm (gauge 28-30) tin plate which is so soft that the surface can be textured simply by drawing a large blunt nail across it. The ball of a ball pein hammer is also suitable for adding detail and texture to the tin plate.

Tin plate is inexpensive to work with but if you cannot obtain it by asking an ironmonger or hardware store to order it for you, you can make do with ordinary tin cans—the rectangular type often used for oil are thicker and not as easily worked but results are equally rewarding.

Tree decoration

The tree was made from tin plate. It was made without the use of a piercing saw. Sections were cut from the tin plate using tin-snips and were then assembled on a wire framework to hold all the pieces together. The surface was textured before soldering it to the framework. Transparent paints were used to add colour.

Other ideas

The methods of working tin plate overleaf can be adapted in a useful way to make original seasonal decorations. The lids from tin cans can be used for decorations—lids from cat food tins are especially suitable. Various shapes can be cut from the lids using tin-snips. Surfaces are then textured and a hole is punched from which to suspend the decoration. Paint the decoration if you wish to add colour. The decorations do have sharp corners and edges so keep them well out of children's reach.

Left: a tin plate tree decoration from Mexico. It was made in sections which were soldered to a wire framework after being textured.
Right: festive decorations are easily made. Those illustrated were made from the lids of ordinary food tins.

Steve Bicknell

Cockerel made from tin plate.

The cockerel

The metal cockerel is 30cm (12″) high. It is made from tin plate and assembled on a base made from a screw type lid. The eye is a clear glass marble sandwiched between the two pieces of tin plate that form the head and body section. The cockerel is three-dimensional and two pieces of metal must be cut for each section of the pattern to make up the design.

You will need:

Soldering tools and equipment—see Metal chapter 15, page 1130.
Tin-snips.
Ball pein hammer and a large blunt nail.
Clear glass marble for the eye—optional.
Jeweller's piercing saw, hand drill and drill bit—see Metal chapter 12, page 837. This is optional as it is used to cut out the eye for the marble. Glue on a suitable bead or paint in the eye.
.3mm (gauge 28-30) tin plate, about 51cm x 38cm (20″x 15″).
7.5cm (3″) diameter screw type lid—for the base.
Tracing paper, felt-tipped pen.
Wire 38cm (15″) long—a wire coat-hanger will do—for the legs.
Metallic coloured paint (optional).

☐ Transfer the design (fig.1) on to tracing paper, cut out pieces.

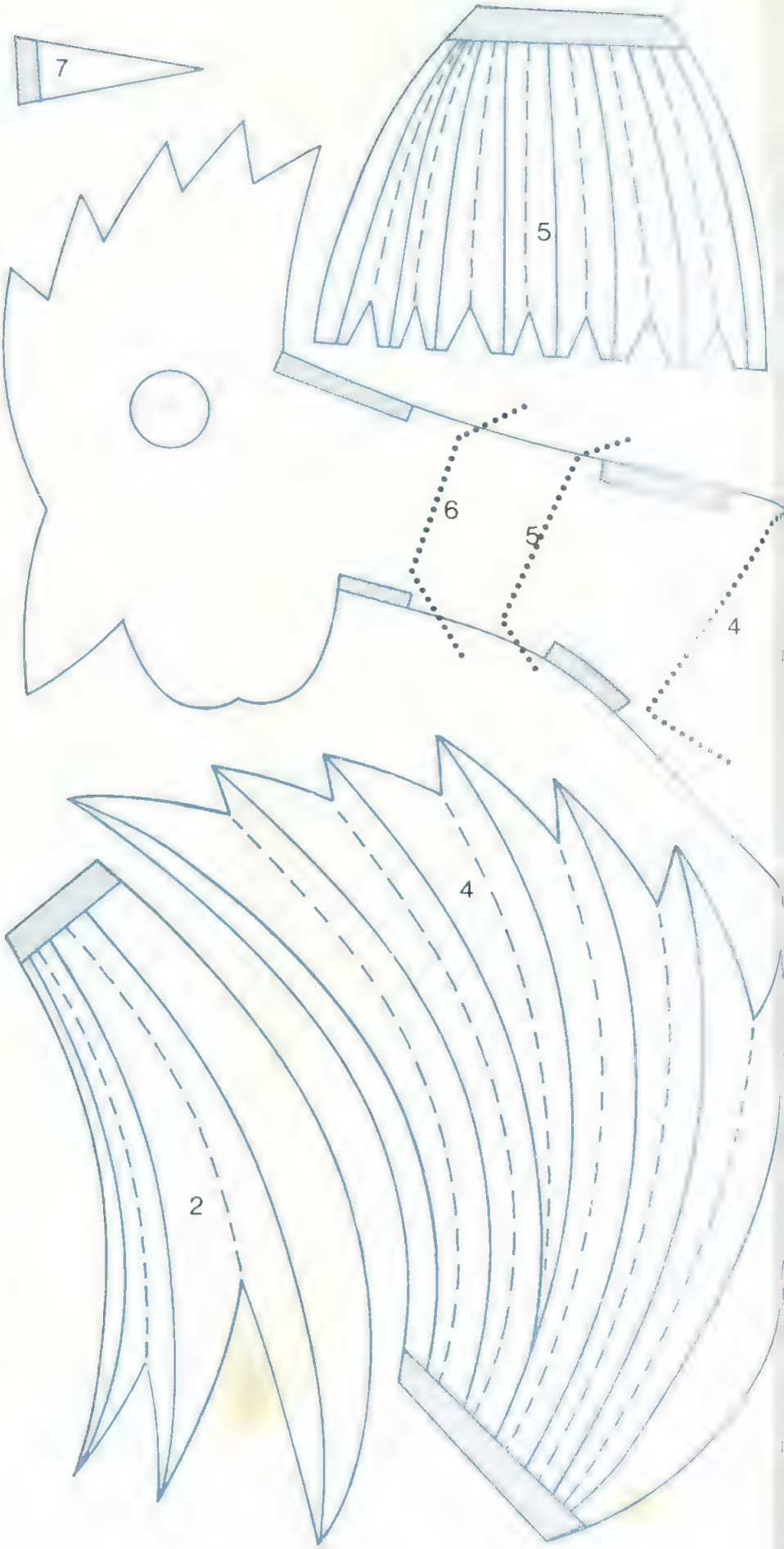
☐ Assemble the cut-outs on the tin plate as closely together as possible and draw the outlines on the tin plate. This will form one half.

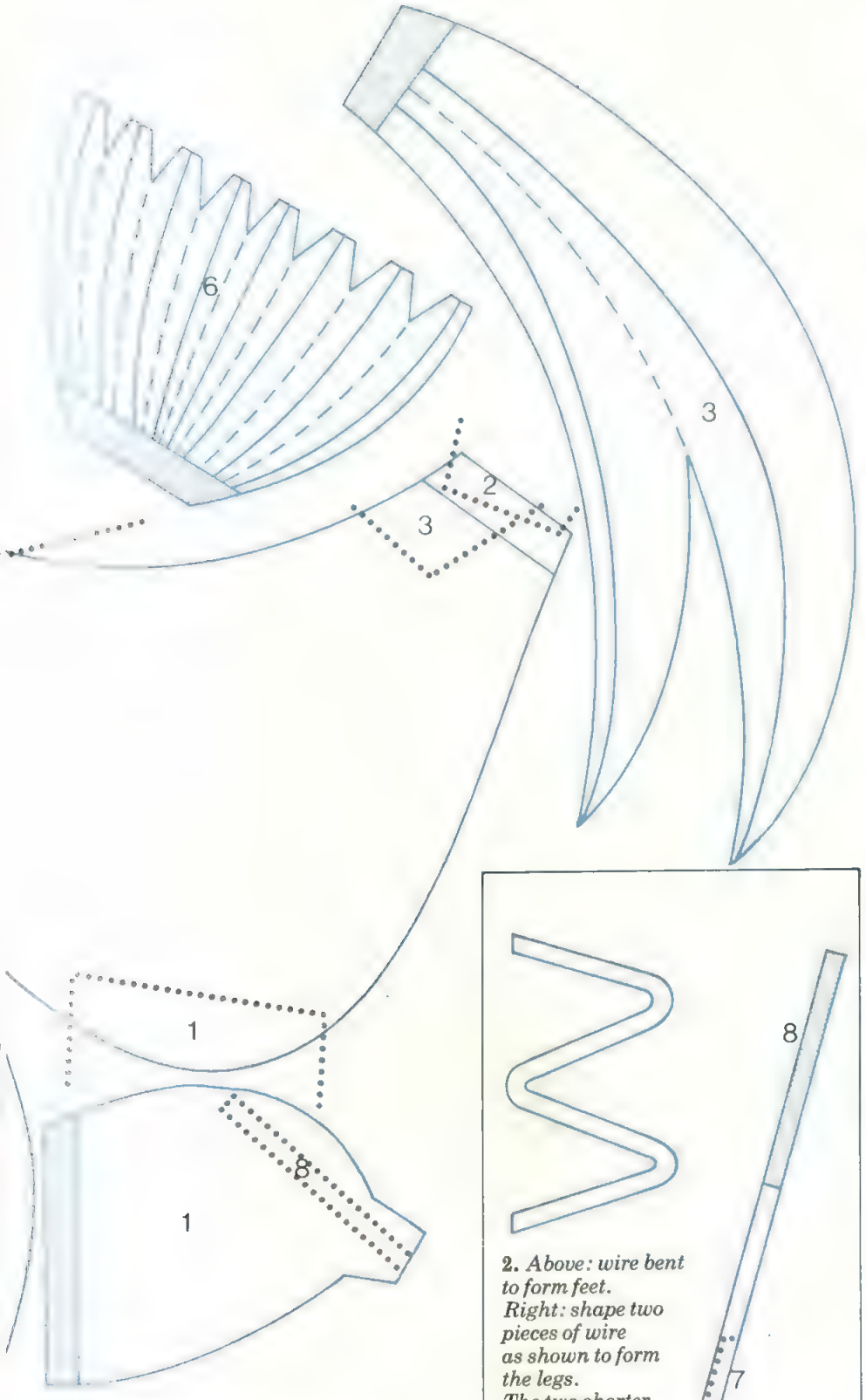
☐ Repeat for the other half.

☐ Using the tin-snips cut round all the sections.

☐ Separate the sections into two so that the two halves of the cockerel can be made and then soldered together.

☐ Put the two sides of combined head and body together. Drill a small hole within the eye and cut out the eye with the piercing saw. If you are using a marble the hole for the eye must be





1. *Trace pattern for sections of the cockerel. You will need two cut-outs of each section. Once you have cut the sections in tin plate follow the key for working instructions.*

Texture facing surface.
Texture reverse side.
Positions of sections.
Soldering areas.

2. *Above: wire bent to form feet. Right: shape two pieces of wire as shown to form the legs. The two shorter flat pieces fit inside the M-shape.*

Trevor Lawrence

slightly smaller than the marble to prevent it from falling out.

☐ Place one head section on a piece of wood, wrong side up and, using the ball of the hammer, hit the eye to make it slightly convex around the edges (concave on the right side). Repeat this with the other head section.

Texturing the surface of the metal.

☐ Use the ball pein hammer to beat the comb and wattle. Do this from the wrong side so that the facing surfaces will have a convex patterned texture.

☐ Texture the plumage sections. Draw lines with the felt-tipped pen on right side as indicated by solid lines on pattern. Using these as guidelines draw the nail firmly along the metal to make an impression. Turn the metal over. Complete the pattern as indicated by the dotted lines.

☐ Solder the sections to body to complete the two halves. Start with the 'drumstick'. This is soldered to the body section on the wrong side of the metal.

Tin the surfaces that make contact by heating the metal and applying the solder to cover the areas being joined.

Sweat them together by putting the surfaces together and applying heat to re-melt the solder.

☐ Solder the plumage to the body, starting from the tail end and working towards the head—this is done on the right side.

☐ Cut and shape the pieces of wire as shown in fig.2 to make the legs.

☐ Solder the triangular sections to the legs for the spurs.

☐ Solder the ends of the longer straight section to the 'drumstick' on the wrong side of the metal (the inside of the leg). Place the wire in such a position that about 2.5cm (1″) of it makes contact with the metal.

☐ Carefully bend the metal sections below the body outwards so that when the two halves of the body are put together the feet are 2.5cm (1″) apart.

☐ Insert the marble in the eye socket. Solder the two halves of the body together. Apply the solder well away from the other soldered sections. Tin the surfaces where they make contact and sweat them together.

☐ Strip the paint from the lid, if necessary, so that the metal is suitable for soldering. Hold the cockerel in position on the lid and solder it together. You will have to hold it together with pliers until the solder cools.

☐ Solder the remaining M-shaped bit of wire to the lid to complete the feet.

☐ Bend the plumage away from the body to make the cockerel three-dimensional.

☐ If you have worked neatly you can leave it as it is, otherwise paint it with a metallic coloured paint.

Skirts from a circle

Skirts based on a circle or section of a circle are simple to make and lend themselves particularly well to being trimmed with hand made braids; appliqué motifs; tie dye or crochet fringes.

This chapter shows how to make above knee length and calf length skirts from a complete circle of fabric, and knee length and full length skirts from a half circle of fabric.

Short full circle skirt

Drawing the outline. A short full circle skirt with only a centre back seam can be made from 137cm (54″) wide fabric or wider. The width of the fabric will determine the maximum length of the skirt.

Fold fabric widthways with selvedges at sides. Mark the centre point. Measure ⅛ of waist measurement from centre and mark. Remaining length to selvedge establishes the length of the skirt.

For instance if you have a 60cm (24″) waist the approximate finished length in 137cm (54″) fabric will be 55cm (22″) or in 152cm (60″) fabric 63cm (25″), without a hem.

Cutting out. Before cutting the fabric should be pressed to remove fold line.

When using 137cm (54″) or 152cm (60″) wide fabric, fold the fabric with right sides together leaving an 11.5cm (4½″) strip in single fabric for the waistband as illustrated.

To keep the fabric flat pin it to the carpet.

Drawing the waistline curve. Tie string to the pencil, measure off ⅛ of waist measurement and put in the drawing pin.

Stick the drawing pin in the very centre of the fold line right on the edge of the fold.

Keeping the string taut, draw a semi-circle on to the fabric.

Drawing hemline curve. Lengthen the string between the drawing pin and pencil to the length of skirt required, plus ⅛ of the waist measurement and hem and seam allowances. Keeping the string taut draw in the hemline, working from the centre point as for the waistline. Leaving the fabric folded on the floor, work a line of tacking stitches 1.5cm (½″) in from the right hand folded edge along one side of skirt. This will be centre back.

Mark with chalk along the left fold line. This is the centre front.

Cut out along the waistline curve and along the hemline. Cut out the waistband.

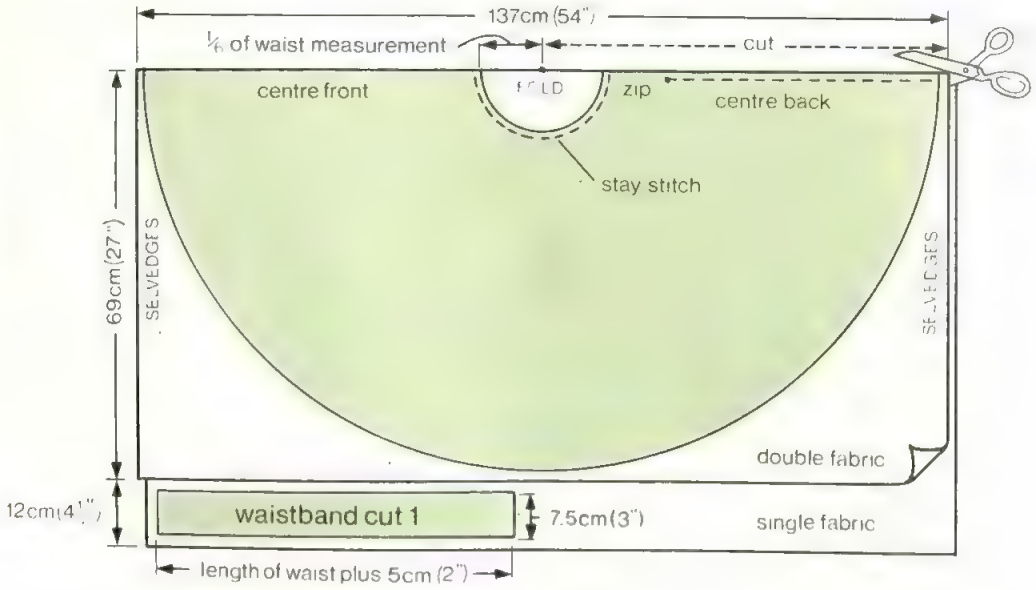
Making up. Machine stitch along the tacked line leaving the top open to required length for the zip.

☐ Cut through the folded edge, open the seam and press. Remove tacking.

☐ Work a row of large machine stitches around the waistline 1.5cm (½″) from the edge, taking care not to stretch the fabric.

☐ Hang skirt from waist to allow fabric to drop.

☐ For insertion of zip, waistband and waistband and hem see next chapter.



Fabric required

For the short above knee length skirt cut in one piece you will need 1.50m (1⅝yds) of 137cm (54″) wide fabric. Any soft fabric with plain or with an all-over design is suitable.

To make any of the skirts

You do not need to buy a pattern, just follow the instructions and illustrations and you will see how easy the circular skirts are to make.

When choosing the fabric it is important to avoid a one way design; stripes are not advisable, although it is possible to use checks or stripes if the skirt has two seams. A plain fabric would be the simplest for the first attempt.

Choose the width of fabric that gives you the length you want.

You will need:

Skirt weight fabric—for amounts see layouts.
Matching sewing thread.
18cm or 20cm (7″ or 8″) zip.
2.5cm (1″) wide interfacing for the waistband, your waist measurement plus 5cm (2″).
Two hooks and eyes.
Drawing pin.
Fine string.
Dressmaker's pencil and chalk.
Tape measure.
Sharp scissors.

Your size. For the full circle skirt, this is worked out by taking $\frac{1}{6}$ of your waist measurement; for the half circle skirt take $\frac{1}{3}$ of your waist measurement. Measure length required from waist edge plus 3cm (1″) for hem and seam allowances. Check on paper that you can cut the required length before you buy your fabric.

Note: You will find the easiest place to work is on a carpeted floor.

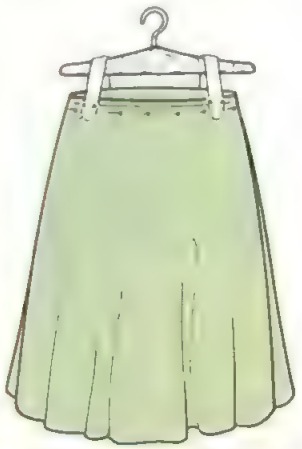
Drawing the cutting lines. The circular cutting lines are drawn straight on to the fabric using the drawing pin and string method, (Design know-how chapter 1, page 28). Having established the length of string required, tie one end to the drawing pin and the other end to the pencil.

When drawing the curved lines keep the string taut and the pencil upright. To keep the string tied in the correct place on the pencil, cut a groove around the pencil just above the tip.

You will find sketches and instructions for stitching the seams, putting in the zip, attaching waistband and turning up hem, Sewing chapter 13, page 1355.

Circular skirts must be left to 'drop' for several days before putting up the hem because of the bias cut of the fabric.

Pin waist edges together, attach tape loops and suspend from a coat hanger. Alternatively, pin skirt on to a dress stand.



Mid-calf full circle skirt

For a full circle skirt in 90cm (36″) fabric the method must be adapted; for a 60cm (24″) waist this will make a skirt approximately 77cm (31″) long.

Cutting and making. Fold the fabric as shown below, right sides facing. The remaining 10cm (4½″) is for the waistband.

☐ Pin the two pieces together and with right sides facing tack and stitch the two selvedges together taking 1.5cm (½″) turnings.

☐ With the fabric double and flat on the floor, stick the drawing pin into the centre and above the stitch line.

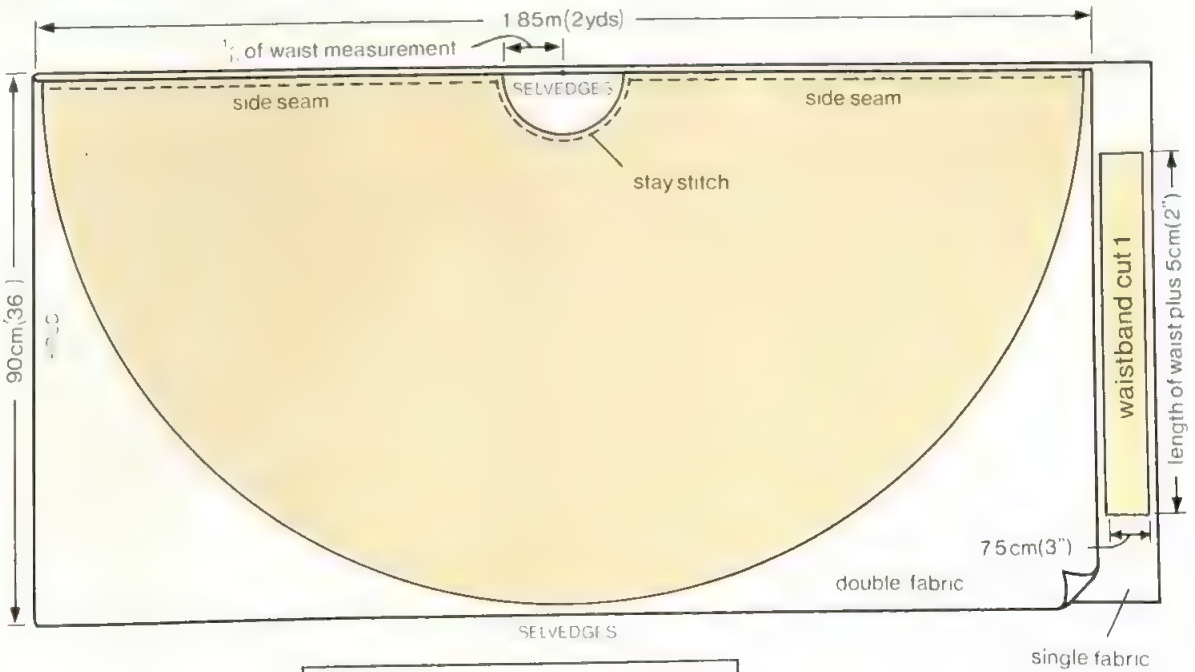
☐ Draw semi-circles as for the short full circle skirt and cut out. The seams will fall at the sides. Press seams open.

☐ Cut out waistband.

☐ Stay stitch around the waistline.

☐ Open one side seam to required length from waist edge for the zip. Hang from the waist to allow fabric to drop.

☐ For insertion of zip, waistband and hem see next chapter.



Fabric required
For the mid-calf length skirt 3.8m (4⅛yds) of 90cm (36″) fabric.

Paul Williams

A full length half circle skirt made up in the Royal Stewart tartan. Plaid must be carefully matched at the seams. The skirt can be worn with the seams at the sides or turned with the seams at centre back and front—it will fit either way.
Although plaid has been used here, it is not recommended for your first attempt at a circular skirt, as great care must be taken to match the plaid and the quantity of fabric adjusted to allow for this. Soft fabrics that hang well are essential; fine tweed, wool jersey, silk and soft cotton would all be suitable.

Long half circle skirt

A full length half circle skirt in 137cm (54″) wide fabric is cut from fabric twice the length of the skirt plus hem and seam allowances and ⅓ of the waist measurement. Maximum length for a 60cm (24″) waist is 114cm (45″).

Cutting out. Fold the fabric in half widthways from selvedge to selvedge, as shown in the diagram on the right, with right sides together, matching up any checks or pattern. If using checked fabric, pin on check lines to keep the fabric and pattern straight.

Drawing the waistline curve. Tie string to the pencil, measure off ⅓ of waist measurement and put in the drawing pin. Stick the pin in the top left-hand corner of the fabric. Keeping the string taut, draw a curved line.

Drawing the hemline. Lengthen the string between the drawing pin and pencil to the length required plus ⅓ of the waist measurement plus hem and seam allowances.

☐ Keeping string taut draw hemline.

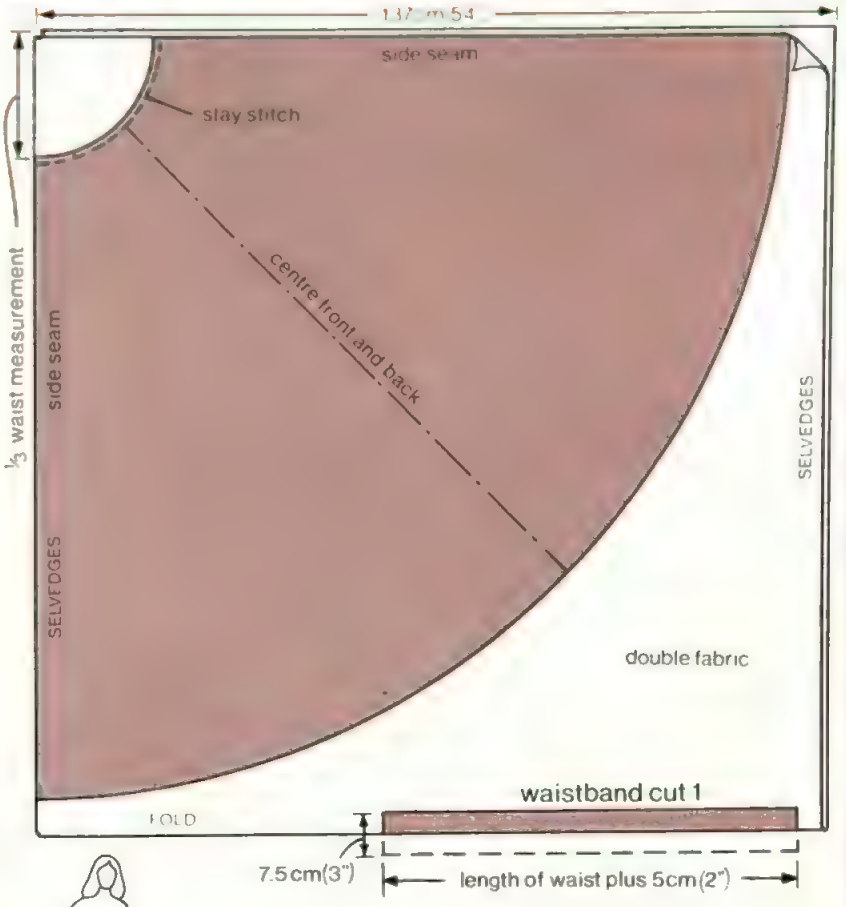
☐ Cut out along waistline curve and hemline.

Cut out waistband.

Making up. Tack and stitch the side seams together leaving an opening in one seam for zip. Press seams open.

☐ Work a row of large machine stitches around the waistline taking care not to stretch the fabric. Hang from waist to allow fabric to drop.

☐ For zip, waistband and hem see next chapter.



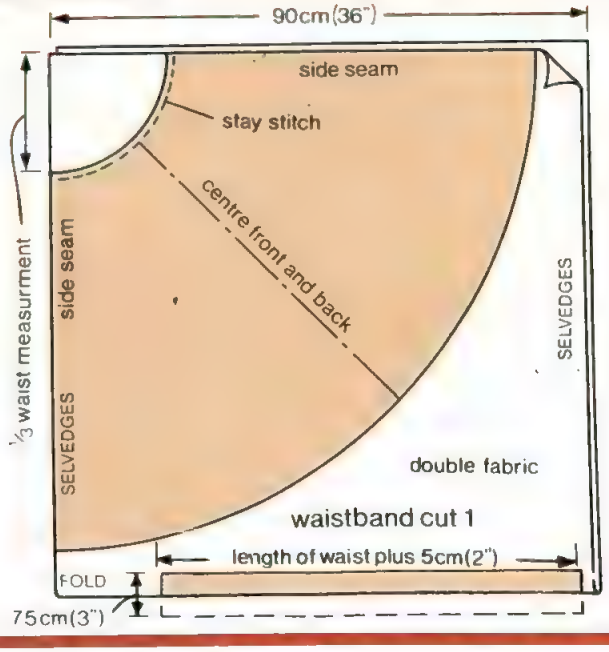
Fabric required
The long skirt takes 2.75cm (3yds) of 137cm (54″) fabric.

Short half circle skirt

This skirt can be made from 90cm (36″) fabric. Maximum length for a 60cm (24″) waist is 67cm (27″).

Cutting and making. Make the string length between the drawing pin and the pencil the length of the skirt required plus ⅓ of the waist measurement plus the hem and the seam allowances. Draw waistline as above.

☐ Cut out and make as for long half circle skirt.



Fabric required
For the knee length skirt you will need 1.85m (2yds) of 90cm (36″) fabric.

Mouthwatering sweets to make

Edible arts 4

Home-made sweets and candies can be great fun to make and very delicious to eat. Prettily packaged they make very welcome presents.

Roughly speaking sweet-making can be divided into three categories: sweets that require no cooking at all and are, therefore, ideal for small children to enjoy making; simple sweets; and sugar boiled sweets.

The last mentioned require special equipment and, because of the high temperature involved, under no circumstances whatsoever should children be allowed anywhere near the pans. If, however, you want the children to be involved in your sugar boiled sweet-making session, let their participation be restricted to preparatory work: oiling a tin for you, sifting icing sugar, halving glacé cherries and so on. Perhaps, as a reward, they can have the fun of deciding on attractive wrappings and packaging.

This chapter and the next give recipes for sweets in each of the three categories mentioned above, starting with a few hints and reminders on ingredients, equipment and techniques.

Notes on ingredients

Liquid or syrup glucose (also known as grape sugar) is less sweet than sugar. It is very useful in sweet-making as it prevents sugar from crystallizing and also whitens and improves the gloss of sweets. Available from large pharmacies, liquid glucose keeps in good condition almost indefinitely.

Cream of tartar and tartaric acid also help cut the grain of sugar, and a pinch of either is often used to replace glucose in many recipes.

Orange flower water and rose water are available from large pharmacies and many food stores.

Food colourings and essences. Always choose the best quality available. In the case of food colouring it is, of course, essential to select edible vegetable based dyes.

Butter. It is a false economy to substitute margarine when sweet-making as the flavour of sweets will be spoilt.

Crystallized and glacé fruit should be soaked in warm water before use. Rub off excess sugar and dry thoroughly with a clean cloth.

Olive oil is best for greasing your work slab, tins, knives and so on. Spread it lightly and evenly with a bristle pastry brush.

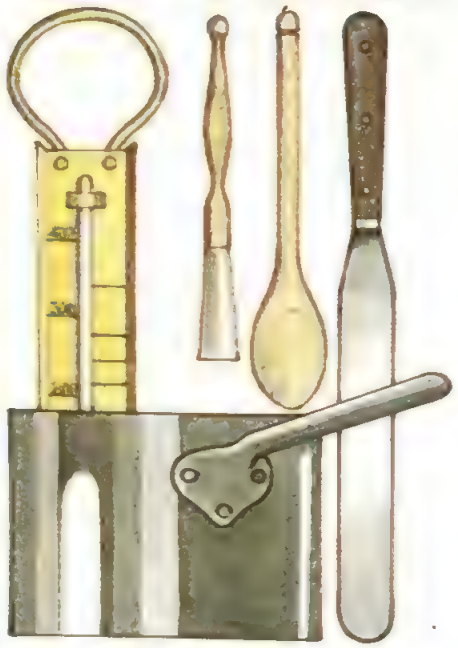
Granulated sugar dissolves better than castor sugar and gives a good clear syrup, so use it unless castor or brown sugar are specifically indicated in the recipe.

Special equipment

If you are making sugar boiled sweets you will need a large, deep, heavy-gauge saucepan with straight sides that will conduct and maintain heat evenly. You will also need two bristle pastry brushes—one for washing down the sides of the pan, and the other for oiling.

A scrupulously clean wooden spoon is also required; a palette knife or a metal sugar scraper; and a cold working slab—preferably marble or some other hard cold surface which will not be damaged by hot syrup or sharp knives.

Last, but by no means least, a sugar thermometer is very important for making sugar boiled sweets. Check the thermometer for accuracy by placing it in a pan of water and bringing to the boil. When the water boils, the thermometer, held at eye level, should read 100°C (212°F). If the thermometer is inaccurate it can still be used, providing allowance is made for the number of degrees by which it is incorrect.



Barbara Firth

Using the proper equipment facilitates successful sweet-making.

Teaspoon testing

Although less desirable, it is possible to make some sugar boiled sweets without a sugar thermometer. In this case temperature is tested by dropping half a teaspoon of the sugar mixture into a cup half-filled with cold water. The condition of the rapidly cooled sugar acts as a temperature gauge (as indicated on the sugar boiling table given in this chapter). Naturally this method of testing is considerably less accurate.

Short thread means that the cooled sugar will feel sticky to the fingers and will form a short thread when the thumb and forefinger are pulled apart.

Long thread means the syrup is slightly more tacky and a longer thread can be formed when finger and thumb are pulled apart.

Soft ball means that the cooled sugar forms into a small very malleable ball.

Hard ball means a firm but still malleable lump of sugar is formed.

Crack means that, as soon as it enters the water, the cooled sugar sets into a brittle thread which will bend and break.

Hard crack means that the brittle thread formed snaps without bending.

Caramel means the colour of the sugar solution turns to light gold, then to deep brown and the cooled sugar is very brittle and breaks easily.

Hints on sugar boiling

It is very important to measure sugar and water accurately. Too much water means the syrup takes longer to reach the required temperature with the result that the syrup discolours. Too much sugar is difficult to dissolve before water reaches boiling point.

Always stir the water and sugar very gently over very low heat to help dissolve the sugar. Every grain must be fully dissolved and stirring stopped before boiling point is reached.

Keep a pan of hot water beside the sugar boiling pan. Use it to hold your thermometer, wooden spoon and a pastry brush.

Frequently wash down the inside of the saucepan with the hot wet pastry brush. This is to brush back into the liquid any crystals that form just above the water level. (If necessary, continue washing down after the syrup boils.)

When the sugar solution boils do not stir the mixture unless specifically directed to do so by the recipe as this causes grainy texture.

Place the warm thermometer (a cold one might shatter) in the syrup pan.

When the desired degree is reached, carefully remove the syrup pan from the heat and replace the thermometer in the hot water pan.

Sweet wrapping papers

Attractive wrappers not only make sweets look more inviting but also help keep sweets in good condition.

Cling film, waxed and non-stick papers are most effective as they keep sweets really airtight. Give these wrappers decorative finishing touches by covering them with tinfoil—gold, silver, brightly coloured or patterned.

Paper confectionery cases do not give the same degree of protection, of course, but their use prevents sweets rubbing against each other and thereby losing their pristine looks.

For gift presentation, pack wrapped sweets into airtight tins or pretty boxes tied with ribbons, and place a sheet of greaseproof paper between each layer of sweets. (Sweets can also be placed on greaseproof paper for drying out.)

Sugar Boiling Table

TEMPERATURE	DESCRIPTION	USE FOR
102°-104°C (215°-220°F)	Short thread	Thin syrups
107°-110°C (225°-230°F)	Long thread	Thick syrups
115°C (240°F)	Soft ball	Fondants and soft fudges
118°-121°C (245°-250°F)	Hard ball	Hard fudges
155°C (310°F)	Crack	Soft toffees
163°C (325°F)	Hard crack	Hard toffees and spun sugar
193°-199°C (380°-390°F)	Caramel	Coating fruit, gateaux and cakes, also as a colouring agent for savoury sauces

Chocolate nut cones

Scrumptious to eat and very simple to make.

You will need:

125gm (4oz) plain chocolate.
1 egg.
25gm (1oz) butter.
2 teaspoons rum.
50gm (2oz) chopped mixed nuts.

☐ Cut six 13cm (5″) squares of greaseproof paper. Divide each into two triangles and make into cone shapes as though making icing bags.

☐ Push the six cones into a container filled with rice, so that they stand upright.

☐ Break the chocolate into small pieces and melt in a bowl placed over a pan of hot, not boiling, water.

☐ Remove from the heat, add the lightly beaten egg, butter, rum and nuts.

☐ Mix thoroughly then pour into the cones.

☐ Insert a wooden meat skewer or lollipop stick into the centre of each chocolate cone.

☐ Chill till set firm, then store in a cool place. Eat as soon as possible.

Pretty presentation idea for delicious chocolate nut cones. Trim to shape the greaseproof paper used for making the sweets, then cover them with lacy paper doilies and decorate with colourful ribbons to look like parasols. Protect the chocolate and nut mixture by covering the top of each cone with a circle of greaseproof paper, making a central hole from which the wooden stick can protrude.

Mervyn Grey

Camera Press

Even small children will enjoy making these delightful egg-shaped sweets that involve no cooking. It is fun deciding how to decorate the eggs and they make delicious eating.

Date eggs

This, like the other 'egg' sweets given here, is a very simple recipe and involves no cooking. Decorate the eggs in any way you choose or copy ideas shown in the photograph.

You will need:

12 whole dates, stoned.
50gm (2oz) chopped pistachio nuts.
2 tablespoons marmalade.
225gm (8oz) packet marzipan.
1 tablespoon icing sugar.
Decorations of your choice.

☐ Mix the chopped pistachio nuts and marmalade together in a bowl.
☐ Stuff the dates with the mixture.
☐ Sprinkle the work surface with icing sugar and roll out the marzipan.
☐ Cut the marzipan into 12 squares.
☐ Roll each date in a marzipan square and mould into an egg shape, then decorate as desired.

Chocolate eggs

It's a delicious idea to roll these eggs in chocolate sprinkles, coat them with icing sugar or dessicated coconut then decorate with a little melted chocolate.

You will need:

250gm (9oz) plain sweet biscuits.
2 tablespoons cocoa powder.
75gm (3oz) ground almonds.
3 tablespoons golden syrup.
4 tablespoons rum.
Coating and decorations of your choice.

☐ Crush the biscuits finely, using a rolling pin, and place in a mixing bowl.
☐ Sprinkle with the cocoa powder and ground almonds, and mix together with your hands.
☐ Add the golden syrup and rum.
☐ Stir well with a wooden spoon to mix the ingredients thoroughly.
☐ Divide the mixture into 12 pieces and roll into egg shapes with your hands.
☐ Coat and decorate each egg as you wish.

Apricot eggs

Fun to make (easy enough for children to produce unaided) and delicious to eat.

You will need:

450gm (1lb) dried apricots.
125gm (4oz) sugar.
1 rounded tablespoon marmalade.
225gm (8oz) packet marzipan.
1 tablespoon icing sugar.
Coating and decorations of your choice.

☐ Put the dried apricots twice through a fine mincer.
☐ Place the minced apricots in a bowl and mix in the sugar and marmalade.
☐ Using your hands, form the mixture into a roll about 5cm (2″) thick.
☐ Sprinkle the icing sugar on to the working surface.
☐ Roll the marzipan out into an oblong large enough to wrap round the apricot roll.
☐ Wrap the marzipan round the apricot roll.
☐ Cut the roll into 12 slices and make each slice into an egg shape.
☐ Coat and decorate as you wish.

Old fashioned humbugs

Making humbugs, or taffies as they are called in the United States, requires strong arms. Pulling and twisting the mixture to achieve a smooth, satiny finish may take up to 20 minutes.

You will need:

450gm (1lb) soft brown sugar
3 tablespoons butter.
125ml (5fl oz) water.
1 tablespoon golden syrup.
¼ teaspoon cream of tartar.
4 drops peppermint oil.
1-2 tablespoons icing sugar.

☐ Place sugar, butter, water, syrup and cream of tartar in a large heavy-gauge pan and stir over low heat until sugar is completely dissolved.
☐ Increase heat to moderate, cover the pan and cook for 3 minutes.
☐ Uncover the pan and bring the mixture to the boil, without stirring. Boil to 132°C (270°F).
☐ Remove pan from the heat and carefully pour the mixture on to an oiled slab (preferably marble).
☐ Allow to cool for 30 seconds, then sprinkle with the peppermint oil.
☐ Work the mixture with a palette knife until cool enough to handle (fig.1).
☐ Gather up the sugar mixture and twist between well oiled hands to make a rope about 46cm-51cm (18″-20″) long.
☐ Fold the rope back on itself and pull and twist again (fig.2). Continue doing this until the mixture is opaque, elastic and shiny.
☐ Wipe the work surface and dust with icing sugar.
☐ Make the sugar mixture into an egg shape, then flatten the narrow end. Hold the 'egg' in one hand and pull away the narrow end with the other hand to make a long rope about 2cm-2.5cm (¾″-1″) thick (fig.3). Let the rope fall in folds on to the dusted slab.
☐ Using a pair of well oiled scissors, cut the rope into 2cm-2.5cm (¾″-1″) lengths, half twisting the rope after each cut to make the humbugs the traditional shape (fig.4).
☐ Cool completely before wrapping and storing in an airtight jar.

...nbug mixture is worked first ... palette knife on an oiled slab.

Pull and twist the rope until the ...ture is opaque, elastic and shiny.

3. *Gradually pull the egg-shaped mixture into a long rope shape.*

4. *Use oiled scissors to cut the rope, twisting after each cut is made.*

Humbugs keep well for two weeks in airtight jars. Use pale coloured soft brown sugar for minty flavoured or dark soft brown sugar for treacly tasting sweets.

Roger Phillips

Melvin Grey

Template bases for lampshades

Basketry lampshades give a warm, attractive light and seem to suit most types of houses and cottages, but they are expensive to buy. However they are quite easy and inexpensive to make as they use very little cane.

This type of lampshade is open at both ends so the stakes are initially held in position in holes made in a cardboard disc. A wire ring with a bulb fitting must be inserted in the lampshade. In other words the lampshade is made to measure after a suitable lampshade ring has been selected. The rings are available in a wide range of sizes and shapes and are suitable for all types of light fittings.

Cylindrical shade

Start with a cylindrical shade, ie straight-sided with a circular cross-section with the same diameter throughout. The shade illustrated was made on a 23cm (9″) ring with a flat fitting and is 20cm (8″) high.

You will need:

Tools—as for previous Basketry chapters.

Thick cardboard disc with 30.5cm (12″) diameter.

23cm (9″) diameter lampshade ring.

Lampshade tape—enough to cover the ring.

56gm (2oz) No.6 (2.6mm) cane.

28gm (1oz) No.5 (2.5mm) cane.

56gm (2oz) flat cane—this is similar to the ordinary cane except that it is flat and only available in one size.

Needle and cotton to secure ring in position.

☐ Place the lampshade ring on the cardboard and draw round it with pencil. Mark the pencil ring at approximately 25mm (1″) intervals all the way round. There should be about 29 marks but, whatever the number, make sure that it will not divide by three otherwise you will not be able to rib rand (Basketry chapter 10, page 1286). If necessary, alter the number of marks to adjust this.

☐ Bind the lampshade ring with the tape so that it is ready to insert later.

☐ Pierce the cardboard with the bodkin at each of the marks just outside the pencilled ring. The holes should be just big enough to take the No.6 (2.6mm) cane. If the holes are too big the stakes will slip about too easily and will make the first process difficult.

☐ Cut one stake for each of the holes from No.6 (2.6mm) cane, 61cm (24″) long.

☐ Insert one stake into each hole and

Left: the stakes for the lampshade are cut from round cane and the weaving is done with flat cane. Designed by Barbara Maynard. Right: weaving is done on stakes pushed through cardboard disc which acts as a template.

pull them through so that 20cm (8″) protrudes on one side for the first border. Nip the short ends near the cardboard so that they turn down easily without cracking.

☐ The next step is putting on a border which will form either the top or bottom of the shade. If you put this border on in the usual way, ie from left to right, you will find that when you turn it up the other way to start the weaving, the stakes will lean over to the right which makes it difficult to control them. This is avoided by putting down the border going the other way, ie from right to left.

Put on a 3-rod border (fig.1) working from right to left. You will find it easier if you rest the edge of the cardboard disc on a table with the long ends pointing towards you. Stand up and lean over the cardboard to manipulate the border canes. Do not trim the ends when finished.

☐ When the border is complete turn the shade so that the cardboard is flat on the table. Place a weight inside the cardboard to keep it steady.

☐ Using No.5 (2.5mm) cane put on 5 rounds of waling. Remember to step-up at the end of each round.

☐ Cut 2 bye-stakes of No.6 (2.6mm) cane for each stake—all 20cm (8″) long. Point one end of each and insert them —one on each side of each stake—into the work.

☐ Rib rand (in front of two, behind one and back to the front) with flat cane for 14cm (5½″). Be very careful to keep the sides quite straight.

☐ Wale with No.5 (2.5mm) cane for one round and insert the taped ring, which should fit exactly, then continue with 4 more rows of waling.

If you let the sides curve in or out and the ring will not fit, insert it from the other end.

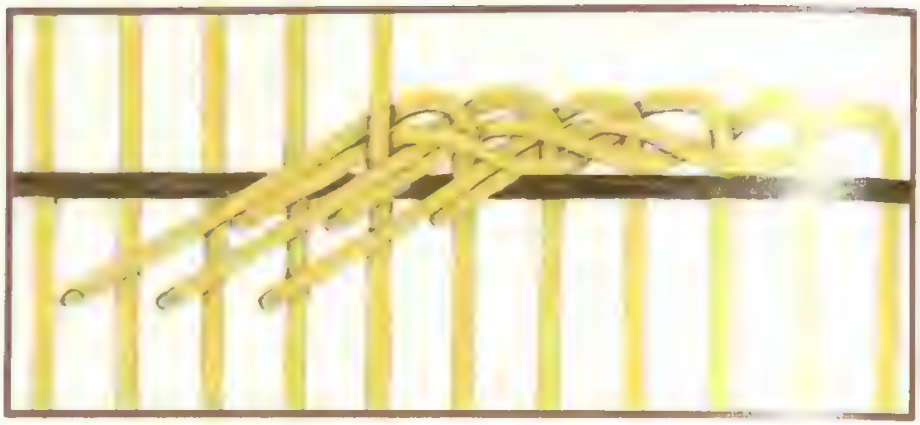
☐ Nip the *stakes* 6mm (¼″) above the waling and cut off all the surplus ends of the *bye-stakes*.

☐ Put on a 3-rod border in the normal way (left to right) and a follow-on trac border.

☐ Turn the shade the other way up to finish the first border.

If you are making a number of shades and want to re-use the cardboard disc, undo the border and gently pull the cardboard up and away from the stakes. Set the disc aside to dry. Turn the border down again (re-soak the stakes if necessary) and put on a follow-on trac border. Trim the ends.

If you are making one shade only and



1. *The shade is started with a 3-rod border working from right to left.*

Lampshades can be made in a variety of shapes. This vase-shaped shade incorporates double randing. The shade is mounted on to a lamp fitting without the usual base. It can be used on a base or as a hanging shade.

do not need to re-use the cardboard disc, soak it in water to soften it and then pull it away from the shade. Put on a follow-on trac border and trim the ends.

Stitch the ring in place to hold it securely. Do not stitch through the canes. Take the thread round the stakes only so that it is lost to sight between the waling.

Vase-shaped shade

The size of the shade is a matter of choice. The one illustrated was made with a 10cm (4″) lampshade ring and is 23cm (9″) high.

You will need:

Thick cardboard disc with 15cm (6″) diameter.
10cm (4″) diameter lampshade ring covered with tape.
56gm (2oz) No.6 (2.6mm) cane.
56gm (2oz) No.4 (2.25mm) cane.
Needle and cotton to secure ring in position.

Lampshades are always started in the same way. The shape of the shade will affect the distance between the stakes depending on how much it curves outwards. If you want the shade to come out a great deal, the stakes round the ring will need to be much closer at the ring end so that they are not too far apart at the edge. Start this shade with the stakes 1.5cm ($\frac{5}{8}$″) apart to allow for the flow in the middle.

23 stakes were used for the lampshade illustrated. If you wish to rib rand, the number of stakes must not be divisible by three. To work a double rand any odd number is sufficient.

☐ Cut the stakes 61cm (24″) long using No.6 (2.6mm) cane. Insert them into the cardboard disc and put on a border as for the previous lampshade.

☐ Put on 4 rounds of waling with No.4 (2.25mm) cane.

☐ Using No.6 (2.6mm) cane cut one bye-stake for each stake. Point one end of each and insert the pointed ends into the waling to the right of the stakes.

☐ Double rand with 2 weavers of No.4 (2.25mm) cane. Always keep one weaver on top of the other and do not let them twist round. Support the stakes with the thumb and forefinger of the left hand. Try not to let the weavers dominate the stakes. Keep the sides of the stakes quite straight for 5cm (2″) then allow them to flow out to a diameter of 14cm (5½″). Try to make a 'bulb' shape. Decrease the diameter as you proceed to 10cm (4″).

☐ Put on 3 rounds of waling with No.4 (2.25mm) cane. Trim the bye-stakes and border down with a 3-rod border and follow-on trac border.

☐ Remove the cardboard and finish the first border as for cylindrical lampshade. Trim the weaver ends and stitch in the ring to finish.

Open-worked shades are quick to make and do not require much cane. The shade is worked from the smaller open end. The stakes and bye-stakes are bent outwards and held in position with a row of fitching. A trac border completes the shade. The shade has been coloured brown with a wood stain and lined with fabric to hide the light fitting.

Open-worked shade

This shade is not covered with weaving. The stakes are left open in parts and held in position with a row of fitching. The light bulb can be hidden by covering the inside of shade with a suitable lampshade lining material—available from large department stores.

The completed shade is 18cm (7″) high.

You will need:

9cm (3½″) diameter lampshade ring covered with tape.
Thick cardboard disc with 12.5cm (5″) diameter.
Thread, needle.
56gm (2oz) No.6 (2.6mm) cane.
28gm (1oz) No.4 (2.25mm) cane.
25cm (¼yd) lampshade lining material —optional.

☐ Make 21 holes round the pencilled ring on the cardboard as before.

☐ Cut 21 stakes 46cm (18″) long from No.6 (2.6mm) cane and insert them into the holes in the cardboard disc so that 10cm (4″) protrude from one side.

☐ Put on a trac border—behind one, in front of three and tuck it to the inside in the next space—going from right to left.

☐ Turn the shade the other way up and put on 4 rounds of waling with No.4 (2.25mm) cane.

☐ Cut 42 bye-stakes of No.6 (2.6mm) cane 38cm (15″) long. Point them at one end and insert them into the waling—one on each side of each of the stakes.

☐ Nip these groups of 3 stakes so that they will bend outwards.

☐ Put on one round of fitching (Basketry chapter 3, page 671) 9cm (3½″) away from the waling to make the diameter of the shade 18cm (7″).

☐ Wale for 4 rounds with No.4 (2.25mm) cane and continue to shape the work outwards.

☐ Put on a trac border (left to right) with all three stakes in turn—behind one, in front of three and tuck the canes to the inside in the next space.

☐ Finish the first border as for the previous shades and trim all the ends.

☐ Shape and stitch lampshade lining material into the lampshade and stitch in the ring to finish.

Using rub-off lettering

Design know-how 48

Instant lettering

Instant lettering is a boon in all fields of designing—and it can be very useful for many kinds of jobs around the home. Essentially, instant lettering (such as Letraset) is an alphabet and/or series of numerals sold in sheet form on a film backing and available from art shops.

The characters (letters or numerals) are transferred on to your chosen foundation, in the order required, to make up words. By applying pressure the shape is transferred in a similar way to other forms of transfer. The characters are available in many different type faces (style of lettering) and in all different sizes, with upper case (capital) and lower case (small) letters. All the styles are available in black and a few are made in colours such as red, blue, gold and green.

The sheets of film are fairly expensive but they are ideal where you require one copy only of lettering which resembles printing rather than handwriting.

Uses for instant lettering. You could use this form of lettering in a greetings card, for menus, headings of pages (such as a guest book), captions for a scrap book, labels for pots and jars, invitations and notices for parties (labels marking sandwiches, cloakroom doors, and so on). You could even make up a house sign with it providing you coat it with exterior grade varnish.

Planning your design. It is wise to plan your design before you begin transferring the figures so that you can check if the lettering will fit into the space you have allowed for it and so that you can position it correctly within that space.

The simplest way of doing this is to trace over the letters lightly (without removing the protective backing from the film) on to a piece of paper and position tracing on the foundation. The starting point can then be marked.

Transferring on to paper or card. Place the foundation flat on your work surface and secure it at each corner with a piece of masking tape. Ruled lines are sometimes difficult to erase without spoiling the lettering, so to keep the lines straight, cut another sheet of paper and place it over the foundation so that the top edge is just below the line of the characters—you can check on the exact position by placing the sheet of film over it and aligning the marks under the characters with the upper layer of paper. Secure this layer with tape.

Peel off the backing paper and position the required character.

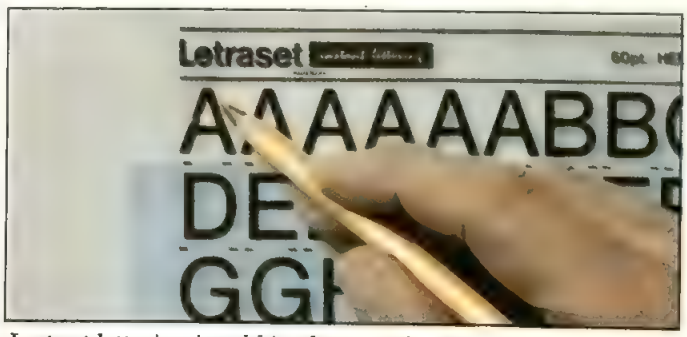
Press the character down with your finger and then shade lightly over the whole letter and the little dash mark below its right-hand side with a soft pencil or any blunt utensil. Carefully pull away the sheet, making sure that the transfer has been completed.

Spacing the characters. The little dash marks beneath the characters are to give an indication of spacing so that the characters will be well arranged. To position the second character, butt its left-hand space mark to the space mark already transferred. Then transfer the second letter with its right-hand space mark. Continue like this until the word is complete. There is no need to transfer the left-hand space marks.

Occasionally a few letters may overlap with this system—TT and LS, for example. When this happens, simply move the sheet slightly to the right to leave a small space between the characters.

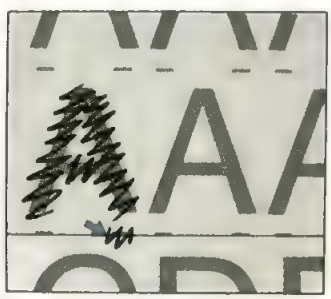
To remove the space marks, lift off by pressing down a soft eraser or piece of adhesive tape and then pull away. Corrections can also be made by this method.

Fixing the letters. To prevent the Letraset peeling off after it has been laid down, it must be burnished and fixed. Cover lettering with backing sheet and rub over lettering firmly with any smooth hard implement such as the back of a spoon. Then spray the lettering with artist's fixative.

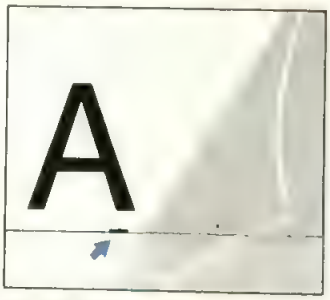


Instant lettering is sold in sheets with a film backing.

The film is peeled off when the letter is transferred.

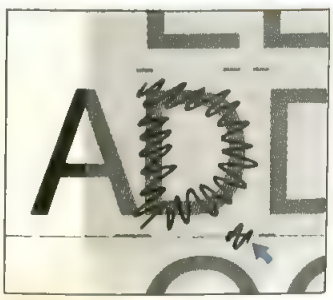


1. *Shading over the first letter and space mark.*



2. *The letter and mark transferred to the foundation.*

3. *Positioning the next letter so that the marks butt.*



4. *Shading over the letter and right-hand mark.*